```
=> d que 124
                      STR
L7
               2
                                    S @10
                                                Ak @11
                                                                                  0 \stackrel{\cdot \cdot \cdot \cdot}{=} C \sim 0 \sim Ak
                                                             C = C \sim Br
 0~ CH2 1
                                                           @12 13 14
                                                                                  15 @16 17 18
                       G2 9
                                                              30
      22
                                                              0
      0
                       0~^ Ak
                                        NH~ Ak
                                                                               Ak \sim N \sim Ak
                                                                               31 @32 33
                                       @25 26
                      @23 24
                                                         NH \sim C \sim Ak
 0 \sim C \sim Ak
                                                       @27 28 29
@19 20 21
       39
                 40
       0
                 0
                                  N \sim N \sim N
                                 @41 42 43
 Ak \sim C \sim N \sim C \sim Ak
 34 35 @36 37 38
VAR G1=0/10/S02/CH2
VAR G2=OH/11/41/CN/12/16/19/23/X/NO2/NH2/25/27/32/36
NODE ATTRIBUTES:
CONNECT IS E2
                     RC AT
                               10
CONNECT IS E1
                     RC AT
                               11
CONNECT IS E1
                     RC AT
                               18
CONNECT IS E1
                     RC AT
                               21
CONNECT IS E1
                     RC AT
                               24
CONNECT IS E1
                     RC AT
                               26
CONNECT IS E1
                     RC AT
                               29
CONNECT IS E1
                     RC AT
                               31
CONNECT IS E1
                     RC AT
                               33
CONNECT IS E1
                     RC AT
CONNECT IS E1 RC AT 38
DEFAULT MLEVEL IS ATOM
           IS PCY UNS AT
GGCAT
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M2 N AT
                                                                                                     emswers contain
purine ringe
GRAPH ATTRIBUTES:
RSPEC
           4
NUMBER OF NODES IS 43
STEREO ATTRIBUTES: NONE
             66390 SEA FILE=REGISTRY ADD-C..
41113 SEA FILE=REGISTRY SUB=L11 SSS FUL L7
2955 SEA FILE=HCAPLUS ABB=ON PLU=ON FLAVIVIRUS+OLD, NT/CT
3441 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 OR FLAVIVIR?
17908 SEA FILE=HCAPLUS ABB=ON PLU=ON L12(L) (BAC OR DMA OR PAC OR CORPORT OR THU)/RL

PKT OR THU)/RL

1322-ON PLU=ON L18 AND L23 CHIRACTORY

Were profitable.
            266390 SEA FILE=REGISTRY ABB=ON PLU=ON NCNC2/ESS AND NCNC3/ESS
L11
L12
L17
L18
L23
L24
```

## =>/d 124 ibib ab hitstr 1-41

```
ANSWER 1 OF 41 HCAPLUS
                              COPYRIGHT 2004 ACS on STN
L24
                         2004:387285 HCAPLUS
ACCESSION NUMBER:
                         Medicinal preparation having chemotherapeutic
TITLE:
                         encapsulated viral envelope vectors
                         Yamamoto, Seiji; Kotani, Hitoshi; Kaneda, Yasufumi
INVENTOR (s):
PATENT ASSIGNEE(S):
                         Genomidea Inc., Japan; Anges Mg, Inc.
                         PCT Int. Appl., 27 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE !
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM\ COUNT:
PATENT INFORMATION:
                      KIND DATE
     PATENT NO.
                                           APPLICATION NO.
                                                            DATE
     WO 2004039406
                            20040513
                                           WO 2003-JP13860
                       A1
                                                            20031029
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, QU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
             GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
             OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ,
             BY, KG, KZ, MQ
         RW: GH, GM, KE, LS\ MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
                                        JP 2002-320577
PRIORITY APPLN. INFO.:
                                                         A 20021101
     It is intended to provide a\medicinal preparation for transferring a
     chemotherapeutic (preferably\an anticancer agent) into cells or the living
     body by using a virus envelope vector. Namely, a medicinal preparation
containing
     a virus envelope vector having a chemotherapeutic encapsulated therein as
     the active ingredient. Examples of the anticancer agent include
     bleomycins, anthraquinone carcinostatic agents, mitomycins, actinomycins,
     taxane derivs., camptothecins, cisplatins, staurosporines, vincristine,
     streptozotocin, 5-fluorouracil (5-Ft) and its derivs., pirarubicin,
     dolastatin and pharmacol. acceptable salts thereof. Examples of the virus
     include sendai virus, retro virus, adenovirus, adeno-associated virus, herpes
     virus, vaccinia virus, pox virus, influenza virus and so on. Bleomycin
     hydrochloride-encapsulated sendai virus envelop vector was prepared, and
     tested for its antitumor activity in colon cancer CT26-bearing mice.
     INDEXING IN PROGRESS
IT
     574-25-4, 6-Mercaptopurine riboside 75607-6₹-9,
IT
     Fludarabine phosphate
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (medicinal preparation having chemotherapeutic encapsulated viral envelope
        vectors with platinum complex and/or antimetabolites)
     574-25-4 HCAPLUS
RN
     Inosine, 6-thio- (9CI) (CA INDEX NAME)
CN
Absolute stereochemistry.
```

RN 75607-67-9 HCAPLUS

CN 9H-Purin-6-amine, 2-fluoro-9-(5-O-phosphono-β-D-arabinofuranosyl)(9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 2 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: \ 2004:183031 HCAPLUS

DOCUMENT NUMBER: \ 140:234402

TITLE: \Recombinant human IL-7 drug substance, its composition

and preparation and therapeutic uses thereof

INVENTOR(S): Morre, Michel Christian; Assouline, Brigitte; Cortez,

Pierre; Gregoire, Anne

PATENT ASSIGNEE(S): Cytheris, Fr.

SOURCE: PCT\Int. Appl., 110 pp.

DOCUMENT TYPE: CODEN: PIXXD2
Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATIO	ON NO. DATE
WO 2004018681	A2 2004	0304 \ WO 2003-EI	P8701 20030806
WO 2004018681	A3 2004	0401 \	
W: AE, AG	, AL, AM, AT,	AU, AZ, BA, BB, BG,	BR, BY, BZ, CA, CH, CN,
CO, CR	, CU, CZ, DE,	DK, DM, DZ, EC, EE,	ES, FI, GB, GD, GE, GH,
GM, HR	, HU, ID, IL,	IN, IS, Τ̈́P, ΚΕ, ΚG,	KP, KR, KZ, LC, LK, LR,
LS, LI	, LU, LV, MA,	MD, MG, MK, MN, MW,	MX, MZ, NI, NO, NZ, OM,
			SK, SL, SY, TJ, TM, TN,
TR, TI	, TZ, UA, UG,	US, UZ, VC, VŅ, YU,	ZA, ZM, ZW, AM, AZ, BY,
KG, KZ	, MD, RU	\_	

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1391513 \ A1 20040225 EP 2002-291996 20020808

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

PRIORITY APPLN. INFO.: EP 2002-291996 A 20020808
US 2003-475881P P 20030605

The present invention relates, generally, to the fields of immunol. and ABmol. biol. The invention discloses, more particularly, new and improved interleukin-7 drug substances, corresponding specific immunoreactive antibodies, as well as compns. comprising the same, their preparation and uses. Specifically disclosed are a purified recombinant human IL-7 conformer comprising the following three disulfide bridges: Cys:1-4(Cys2-Cys92); 2-5 (Cys34-Cys129) and 3-6 (Cys47-Cys141). The invention also discloses methods to characterize the impurity profile of a r-hlL-7 drug substance used for therapeutic purpose, as well as optimized nucleotide sequences encoding mammalian IL-7, recombinant expression vectors and methods for preparing and purifying said polypeptides. The present invention stems from the unexpected discovery that the long term activity of recombinant IL-7 is mostly expressed by a specific conformer and that other conformers, potential product-related substances, product-related impurities, and process-related impurities, which would normally be included in the specification of the drug substance and/or drug product, although bioactive, should be strictly minimized because they are able to trigger an immune reaction against the desired IL-7 mol.

IT 2382-65-2

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(adjuvants for recombinant human IL-7; recombinant human IL-7 drug
substance, its composition and preparation and therapeutic uses thereof)

RN 2382-65-2 HCAPLUS

CN Guanosine, cytidylyl-(3'→5')- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 3 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:157517 HCAPLUS

DOCUMENT NUMBER: 140:198092

TITLE: Recombinant human IL-7 drug substance, its composition

and preparation and therapeutic uses thereof

INVENTOR(S): Morre Michel Christian; Assouline, Brigitte; Cortez,

Pierre; Gregoire, Anne

PATENT ASSIGNEE(S): Cytheris, Fr.

SOURCE: Eur. Pat. Appl., 53 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

```
KIND DATE APPLICATION NO. DATE
    PATENT NO.
                                          EP 2002-291996
                            20040225
                      A1
                                                            20020808
    EP 1391513
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
                      A2
                            20040304
                                          WO 2003-EP8701
    WO 2004018681 \
                                                            20030806
                       A3
    WO 2004018681 \
                            20040401
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
            NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
            GW, ML, MR, NE, SN, TD, TG
                                  EP 2002-291996
PRIORITY APPLN. INFO.:
                                                         A 20020808
                                       US 2003-475881P P 20030605
     The present invention relates, generally, to the fields of immunol. and
AB
    mol. biol. The invention discloses, more particularly, new and improved
     interleukin-7 drug substance's, corresponding specific immunoreactive
     antibodies, as well as compns. comprising the same, their preparation and uses.
     Specifically disclosed are a purified recombinant human IL-7 conformer
     comprising the following three disulfide bridges: Cys:1-4(Cys2-Cys92);
     2-5 (Cys34-Cys129) and 3-6 (Cys47-Cys141). The invention also discloses
    methods to characterize the impurity profile of a r-hlL-7 drug substance
    used for therapeutic purpose, as well as optimized nucleotide sequences
     encoding mammalian IL-7, recombinant expression vectors and methods for
    preparing and purifying said polypeptides. The present invention stems from
    the unexpected discovery that the long term activity of recombinant IL-7
     is mostly expressed by a specific conformer and that other conformers,
     potential product-related substances, product-related impurities, and
    process-related impurities, which would normally be included in the
     specification of the drug substance and/or drug product, although
    bioactive, should be strictly minimized because they are able to trigger
     an immune reaction against the desired IL-7 mol.
     2382-65-2
IT
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (adjuvants for recombinant human IL-λ; recombinant human IL-7 drug
        substance, its composition and preparation and therapeutic uses thereof)
     2382-65-2 HCAPLUS
RN
    Guanosine, cytidylyl-(3'→5')- (7CI, 8CI, 9CI)
                                                    (CA INDEX NAME)
CN
```

$$H_{2N}$$
 $H_{N}$ 
 $H_{$ 

REFERENCE COUNT:

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 4 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER

TITLE:

AUTHOR(S):
CORPORATE SOURCE:

CORPORATE BOOKEE

SOURCE:

AB

PUBLISHER:
DOCUMENT TYPE:
LANGUAGE:

2004:149406 HCAPLUS
Excision of Incorporated Nucleotide Analogue

CODEN: JMOBAK; ISSN: 0022-2836

Chain-terminators can Diminish their Inhibitory
Effects on Viral RNA-dependent RNA Polymerases
D'Abramo, Claudia M.; Cellai, Luciano; Gotte, Matthias
Lady Davis Institute-Jewish General Hospital, McGill
University AIDS Centre, Montreal, QC, H3T 1E2, Can.
Journal of Molecular Biology (2004), 337(1), 1-14

Elsevier Journal English

Bovine viral diarrhea virus (BVDV) is amongst the best-characterized members of the Flaviviridae, that includes the hepatitis C virus The virally encoded RNA-dependent RNA polymerase (RdRp) plays a crucial role during replication and therefore represents an important target for the development of antiviral drugs. Here the authors studied biochem. mechanisms associated with the inhibition of BVDV RNA synthesis by 2'-hydroxyl, 3'-deoxynucleoside triphosphates (3'-dNTPs). All four nucleotide analogs are effectively incorporated and act as. chain-terminators. However, relatively low, physiol. relevant concns. of pyrophosphate (PPi) are sufficient to drive the reaction backwards, which results in primer unblocking and rescue of RNA synthesis. requirements for nucleotide incorporation and pyrophosphorolysis are similar; the efficiency of both reactions is higher with Mn2+ as compared to Mg2+. Complexes containing chain-terminated primer strands are stable in the presence of heparin, which increases the probability that pyrophosphorolysis occurs before the enzyme can dissociate from its nucleic acid substrate. In contrast to the reverse transcriptase of the human immunodeficiency virus type-1 (HIV-1 RT), the BVDV RdRp may not recruit nucleoside triphosphate (NTP) pools as PPi donors. Conversely, the authors found that the efficiency of primer unblocking is severely compromised in the presence of increasing concns. of the NTP that is complementary to the next template position. These data suggest that the incoming NTP can access its designated binding site, which, in turn, prevents the catalytically competent complexation of PPi. The results of this study provide novel insights into mechanisms involved in pyrophosphorolysis associated with viral RdRps, and suggest that the excision reaction is likely to be an important parameter that can affect susceptibility to nucleotide analog inhibitors directed against viral RdRps.

IT 73-04-1 55968-37-1

RL: PAC (Pharmacological activity); THU (Therapeutic

use); BIOL (Biological study); USES (Uses)

(excision of incorporated nucleotide analog chain-terminators by pyrophosphate can diminish their inhibitory effects on viral

RNA-dependent RNA polymerases in relation to divalent metal ions and nucleoside triphosphates)

RN 73-04-1 HCAPLUS

CN Adenosine 5'-(tetrahydrogen triphosphate), 3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 55968-37-1 HCAPLUS

CN Guanosine 5'-(tetrah)drogen triphosphate), 3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 5 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:60253 HCAPLUS

DOCUMENT NUMBER: 140:\127195

TITLE: Antibodies specifically bind to anionic phospholipids

and/or aminophospholipids conjugated with duramycin peptide for treating viral infections and cancer

INVENTOR(S): Thorpe, Philip E.; Soares, Melina M.; Huang, Xianming;

He, Jin; Ran, Sophia

PATENT ASSIGNEE(S): Board of Regents the University of Texas System, USA

SOURCE: PCT Int. Appl., 378 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE WO 2003-US21925 20030715 WO 2004006847 **A2** 20040122 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 2002-396263P P 20020715 Disclosed are surprising discoveries concerning the role of anionic ABphospholipids and aminophospholipids in tumor vasculature and in viral entry and spread, and compns. and methods for utilizing these findings in the treatment of cancer and viral infections. Also disclosed are advantageous antibody, immunoconjugate and duramycin-based compns. and combinations that bind and inhibit anionic phospholipids and aminophospholipids, for use in the safe and effective treatment of cancer, viral infections and related diseases. 5536-17-4D, Vidarabine, conjugates ITRL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antibodies specifically bind to anionic phospholipids and/or aminophospholipids conjugated with duramycin peptide for treating viral infections and cancer) 5536-17-4 HCAPLUS RN9H-Purin-6-amine, 9-β-D-arabinofuranosyl- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

L24 ANSWER 6 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:20697 HCAPLUS

DOCUMENT NUMBER: 140:87662

TITLE: 2'- and 3'-nucleoside prodrugs for treating

Flaviviridae infections

INVENTOR(S): Sommadossi, Jean-pierre; La Colla, Paolo; Storer,

Richard; Gosselin, Gilles

PATENT ASSIGNEE(S): Idenix (Cayman) Limited, Cayman I.; Centre National de

la Recherche Scientifique; Universita Degli Studi di

```
Cagliari
                         PCT Int. Appl., 2498 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                                            DATE
                                           WO 2003-IB3901
                       A2
                            20040108
                                                             20030627
     WO 2004003000
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                        US 2002-392350P P 20020628
                                        US 2002-392351P P 20020628
                                        US 2003-466194P P 20030428
                                        US 2003-470949P P 20030514
OTHER SOURCE(S):
                         MARPAT 140:87662
     2' And 3'-Prodrugs of 1'-, 2'-, 3'-, or 4'-branched \beta-D or \beta-L
AB
     nucleosides, or their pharmaceutically acceptable salts and derivs., are
     described which are useful in the prevention and treatment of
     Flaviviridae infections and other related conditions.
     modified nucleosides provide superior results against flaviviruses
     and pestiviruses, including hepatitis C virus and viruses generally that
     replicate through an RNA-dependent RNA reverse transcriptase. Compds.,
     compns., methods and uses are provided for the treatment of
     Flaviviridae infection, including HCV infection, that include the
     administration of an effective amount of the prodrugs of the invention, or
     their pharmaceutically acceptable salts or derivs. These drugs may
     optionally be administered in combination or alternation with further
     antiviral agents to prevent or treat Flaviviridae infections and
     other related conditions. Preparation of compds. of the invention is included.
     2096-10-8 15397-12-3 374750-30-8
IT
     640725-73-1 640725-74-2 640725-75-3
     640725-76-4 640725-77-5
     RL: PAC (Pharmacological activity); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (nucleoside prodrugs for treating Flaviviridae infections)
     2096-10-8 HCAPLUS
RN
                                (CA INDEX NAME)
     Adenosine, 2-amino- (9CI)
CN
```

374750-30-8 RN**HCAPLUS** CN

Guanosine, 2' -C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

640725-73-1 HCAPLUS RN

Adenosine, 2-amino-2'-C-methyl- (9CI) (CA INDEX NAME) CN

RN 640725-74-2 HCAPLUS

CN 9H-Purin-2-amine, 6-chloro-9-(2-C-methyl-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 640725-75-3 HCAPLUS

CN L-Valine, 3',5'-diester with 6-chloro-9-(2-C-methyl-β-D-ribofuranosyl)-9μ-purin-2-amine, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 HCl

RN 640725-76-4 HCAPLUS CN Adenosine, 2'-C-ethynyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 640725-77-5 HCAPLUS

CN Adenosine, 2-amino-N-cyclopropyl-2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 205171-05-7 374750-32-0 565450-78-4

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (nucleoside prodrugs for treating Flaviviridae infections,

(nucleoside prodrugs for treating Flaviviridae infections and use with other agents)

RN 205171-05-7 HCAPLUS

CN 9H-Purine, 6-chloro-9-(2-C-methyl-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

RN 374750-32-0 HCAPLUS

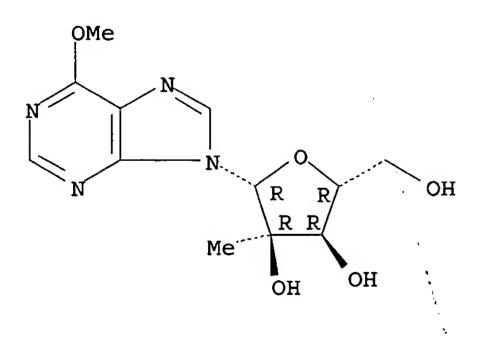
CN Inosine, 2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 565450-78-4 HCAPLUS

CN Inosine, 2'-C-methyl-6-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 7 OF 41 HCAPLUS COPYRIGHT\2004 ACS on STN

ACCESSION NUMBER: 2004:20696 HCAPLUS

DOCUMENT NUMBER: 140:77365

TITLE: Preparation of modified 2'- and 3'-nucleoside prodrugs

for treating Flaviviridae infections

INVENTOR(S): Sommadossi, Jean-pierre; La Colla, Poalo; Storer,

Richard; Gosselin, Gilles

PATENT ASSIGNEE(S): Idenix (Cayman) Limited, Cayman I.; Universita degli studi di Cagliari; Centre National de la Recherche

```
Scientifique
                         PCT Int. Appl., 201 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                      KIND
     PATENT NO.
                            DATE
                                           APPLICATION NO.
                                                            DATE
     WO 2004002999
                       A2
                            20040108
                                           WO 2003-IB3246
                                                             20030627
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM/, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             ĠW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                        US 2002-392350P
                                                             20020628
                                        US 2002-392351P P
                                                            20020628
                                        US 2003-466194P P
                                                            20030428
                                        US 2003-470949P P
                                                            20030514
OTHER SOURCE(S):
                         MARPAT 140:77365
     2' And/or 3' prodrugs of 1', 2', 3' or 4'-branched-nucleosides I, wherein
AB
    R1-R3 are independently H, phosphate, alkyl, acyl, CO-alkyl, CO-aryl,
     CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, sulfonate ester,
     benzyl, wherein the Ph group is optionally substituted with one or more
     substituents, \alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, lipid, amino
     acid, carbohydrate, peptide, cholesterol; Y1 is hydrogen, bromo, chloro,
     fluoro, iodo, CN, OH, OR4, NH2, NHR4, NR4R5, SH or SR4; X1 and X2 are
     independently alkyl, CH3, CF3, CY3, 2-Br-Et, CH2F, CH2Cl, CH2CF3, CF2CF3,
     CY2CY3, CH2OH, alkenyl, alkynyl, COOH, COOR4, COO-alkyl, COO-aryl,
     CO-O-alkoxyalkyl, CONH2, CONHR4, CON(R4)2, halo, CN, N3, OH, OR4, NH2,
     NHR4, NR4R5, SH or SR5; Y is independently H, halo; and each R4 and R5 is
     independently hydrogen, acyl, alkyl, lower alkyl, alkenyl, alkynyl or
     cycloalkyl, and their pharmaceutically acceptable salts and derivs. are
     described. These prodrugs are useful in the prevention and treatment of
     Flaviviridae infections, including HCV infection, and other
     related conditions. Compds. and compns. of the prodrugs of the present
     invention are described. Methods and uses are also provided that include
     the administration of an effective amount of the prodrugs of the present
     invention, or their pharmaceutically acceptable salts or derivs. These
     drugs may optionally be administered in combination or alteration with
     further anti-viral agents to prevent or treat Flaviviridae
     infections and other related conditions. Thus, antiviral activity of
     \beta-D-2'-C-methyl-7-methyl-6-phenyl-3,3a,5,8a-tetrahydro-1,3,4,5,7a-
    penta-aza-s-indacen-8-one is reported.
    640281-91-0
IT
    RL: PAC (Pharmacological activity); THU (Therapeutic
    use); BIOL (Biological study); USES. (Uses)
        (preparation of modified and nucleoside prodrugs for treating
        flaviviridae infections)
     640281-91-0 HCAPLUS
RN
     9H-Imidazo[1,2-a]purin-9-one, 3,4-dihydro-7-methyl-3-(2-C-methyl-β-D-
CN
```

ribofuranosyl)-6-phenyl- (9CI) (CA INDEX NAME)

```
Absolute stereochemistry.

Me O N N N R R O OH OH OH
```

L24 ANSWER 8 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:18891 HCAPLUS

DOCUMENT NUMBER: 140:71067

TITLE: \ Method for preparation of large volume batches of

poly-ICLC with increased biological potency, and therapeutic, clinical and veterinary uses thereof

INVENTOR(S): Salazar, Andres
PATENT ASSIGNEE(S): Oncovir, Inc., USA

SOURCE: \ U.S. Pat. Appl. Publ., 14 pp.

CODEN: USXXCO

DOCUMENT TYPE:\ Patent English

FAMILY ACC. NUM.\COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE

US 2004005998 A1 20040108 US 2003-611614 20030701
PRIORITY APPLN. INFO. US 2002-393713P P 20020703

The invention discloses a method for producing large lots of final sterile poly-ICLC suitable for clin. use with reduced toxicity at ED levels, as well as a method for using poly-ICLC to regulate genes and a method for using poly-ICLC to treat certain human and veterinary infectious, neoplastic and autoimmune disorders.

IT 59789-29-6P, Poly-ICLC\

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); USES (Uses)

(preparation of large volume batches of poly-ICLC with increased biol. potency, and therapeutic use)

RN 59789-29-6 HCAPLUS

CN L-Lysine, homopolymer, compd. with cellulose carboxymethyl ether and 5'-inosinic acid homopolymer complex with 5'-cytidylic acid homopolymer (?:?:?:1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 64769-70-6

CMF (C10 H13 N4 O8 P)x . (C9 H14 N3 \ O8 P)x . (C6 H14 N2 O2)x

CM 2

```
CRN 25104-18-1
CMF/ (C6 H14 N2 O2) x
CCI PMS

CM 3

CRN 56-87-1
CMF C6 H14 N2 O2
```

```
Absolute stereochemistry.
```

```
L24 ANSWER 9 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN
```

ACCESSION NUMBER:

2004:2898 HCAPLUS

DOCUMENT NUMBER:

140:42424

TITLE:

Preparation of nucleoside derivatives as inhibitors of

RNA-dependent RNA viral polymerase

INVENTOR(S):

Carroll, Steven S.; Olsen, David B.; Durette, Philippe L.; Bhat, Balkrishen; Dande, Prasad; Eldrup, Anne B.

DATE

Merck & Co., Inc., USA; Isis Pharmaceuticals, Inc.

SOURCE:

PCT Int. Appl., 43 pp. CODEN: PIXXD2

Patent

DOCUMENT TYPE: LANGUAGE:

English

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

DATE APPLICATION NO. PATENT NO. KIND

20031231 WO 2003-US19172 20030617 **A2** WO 2004000858

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

Searched by Paul Schulwitz (571)272-2527

```
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
                                        US 2002-390579P P 20020621
PRIORITY APPLN. INFO.:
                         MARPAT 140:42424
OTHER SOURCE(S):
     The present invention provides nucleoside compds. I, wherein B is
     nucleobase; R1 is fluoromethyl, difluoromethyl, trifluoromethyl; R2 is H,
     F, amino, OH, SH, alkoxy, alkylcarbonyloxy, alkyl; R3 and R4 are
     independently H, Cn, N3, halogen, OH, SH, amino, alkoxy, alkylcarconyloxy,
     alkenyl, alkynyl; R5 is H, alkylcarbonyl, P3O9H4, P2O6H3, phosphophonyl;
     R6 and R7 independently H, Me, hydroxymethyl, fluoromethyl; and certain
     derivs. thereof which are inhibitors of RNA-dependent RNA viral
     polymerase. These compds. are inhibitors of RNA-dependent RNA viral
     replication and are useful for the treatment of RNA-dependent RNA viral
                They are particularly useful as inhibitors of hepatitis C
     virus (HCV) NS5B polymerase, as inhibitors of HCV replication, and/or for
     the treatment of hepatitis & infection. The invention also describes
     pharmaceutical compns. containing such nucleoside compds. alone or in
     combination with other agents\active against RNA-dependent RNA viral
     infection, in particular HCV infection. Also disclosed are methods of
     inhibiting RNA-dependent RNA polymerase, inhibiting RNA-dependent RNA
     viral replication, and/or treating RNA-dependent RNA viral infection with
     the nucleoside compds. of the present invention.
     2-amino-9-(2-C-fluoromethyl-β-D-ribofuranosyl)-3,9-dihydropurin-6-one
     was prepared and tested as inhibitor of RNA-dependent RNA viral polymerase.
     Title compds. tested in the HCV N$5B polymerase assay exhibited IC50's
     less than 100 \mumol.
IT
     636581-84-5P 636581-85-6P 636581-86-7P
     636581-87-8P 636581-88-9P 636581-89-0P
     636581-90-3P 636581-94-7P 636581-95-8P
     636581-96-9P 636581-97-0P 636581-98\1P
     636581-99-2P 636582-00-8P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation);
     THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (preparation of nucleoside derivs. as inhibitors of RNA-dependent RNA viral
       polymerase)
RN
     636581-84-5 HCAPLUS
     Adenosine, 2'-C-(fluoromethyl)- (9CI) (CA INDEX NAME)
CN
Absolute stereochemistry.
```

RN 636581-85-6 HCAPLUS
CN 9H-Purin-6-amine, 9-[2-C-(fluoromethyl)-β-D-arabinofuranosyl]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 636581-86-7 HCAPLUS
CN Guanosine, 2'-C-(fluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 636581-87-8 HCAPLUS \
CN 6H-Purin-6-one, 2-amino-9-\[2-C-(fluoromethyl)-β-D-arabinofuranosyl]1,9-dihydro-(9CI) (CA INDEX NAME)

RN 636581-88-9 HCAPLUS

CN Guanosine, 2'-C-(fluoromethyl)-6-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 636581-89-0 HCAPLUS

CN Adenosine, 2-amino-2'-C-(fluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $N$ 
 $N$ 
 $R$ 
 $R$ 
 $R$ 
 $OH$ 
 $CH_2F$ 

RN 636581-90-3 HCAPLUS

CN Adenosine, 2'-C-(fluoromethyl)-N-methyl- (9CI) (CA INDEX NAME)

RN 636581-94-7 HCAPLUS

CN Adenosine 5'-(tetrahydrogen triphosphate), 2'-C-(fluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$NH_2$$
 $NH_2$ 
 $NH_2$ 

RN 636581-95-8 HCAPLUS

CN 9H-Purin-6-amine, 9-[2-C-(fluoromethyl)-5-O-[hydroxy[[hydroxy(phosphonooxy
)phosphinyl]oxy]phosphinyl]-β-D-arabinofuranosyl]- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.

RN 636581-96-9 HCAPLUS

CN Guanosine 5'-(tetrahydrogen triphosphate), 2'-C-(fluoromethyl)- (9CI) (CA INDEX NAME)

RN 636581-97-0 HCAPLUS

CN 6H-Purin-6-one, 2-amino-9-[2-C-(fluoromethyl)-5-O[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]-β-Darabinofuranosyl]-1,9-dihydro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 636581-98-1 HCAPLUS

CN Guanosine 5'-(tetrahydrogen triphosphate), 2'-C-(fluoromethyl)-6-thio-(9CI) (CA INDEX NAME)

Absolute stereochemistry

RN 636581-99-2 HCAPLUS

CN Adenosine 5'-(tetrahydrogen triphosphate), 2-amino-2'-C-(fluoromethyl)(9CI) (CA INDEX NAME)

$$NH_2$$
 $NH_2$ 
 $NH_2$ 

636582-00-8 **HCAPLUS** RN

Adenosine 5'-(tetrahydrogen triphosphate), 2'-C-(fluoromethyl)-N-methyl-CN(CA INDEX NAME) (9CI)

## Absolute stereochemistry.

ANSWER 10 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN L24

2003:1006709 HCAPLUS ACCESSION NUMBER:

140:35898 DOCUMENT NUMBER:

Carbocyclic nucleoside derivatives as inhibitors of TITLE:

RNA dependent RNA viral polymerase

Bhat, Balkrishen; Bhat, Neelima; Dande, Prasad; INVENTOR(S):

Eldrup, Anne B.; Olsen, David B.; MacCoss, Malcolm Merck & Co., Inc., USA; Isis Pharmaceuticals, Inc.

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 74 pp.

CODEN | PIXXD2

Patent\ DOCUMENT TYPE: English LANGUAGE:

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

DATE PATENT NO. KIND APPLICATION NO. DATE **A2** 20031224 WO 2003105770 WO 2003-US18841 20030614 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH,

> Searched by Paul Schulwitz (571)272-2527

```
PL, PT, RO, RU, SC, SD/SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
                                        US 2002-389161P P 20020617
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
                         MARPAT 140:35898
     The present invention provides carbocyclic nucleoside compds. and certain
AB
     derivs. thereof which are inhibitors of RNA-dependent RNA viral
     polymerase. These compds. are inhibitors of RNA-dependent RNA viral
     replication and are useful for the treatment of RNA-dependent RNA viral
     infection. They are particularly useful as inhibitors of hepatitis C
     virus (HCV) NS5B polymerase, as inhibitors of HCV replication, and/or for
     the treatment of hepatitis C infection. The invention also describes
     pharmaceutical compns. containing such carbocyclic nucleoside compds. alone or
     in combination with other agents active against RNA-dependent RNA viral
     infection, in particular HCV infection. Also disclosed are methods of
     inhibiting RNA-dependent RNA polymerase, inhibiting RNA-dependent RNA
     viral replication, and/or treating RNA-dependent RNA viral infection with
     the carbocyclic nucleoside compds. of the present invention. HCV NS5B
     polymerase was inhibited with IC50's less than 100 μM.
IT
     636583-01-2 636583-02-3 636583-03-4
     636583-04-5 636583-17-0 636583-17-0D,
     pharmaceutically-acceptable salts 636583-18-1
     636583-18-1D, pharmaceutically-acceptable salts
     636583-19-2 636583-19-2D, pharmaceutically-acceptable
     salts 636583-20-5 636583-20-5D, pharmaceutically-
     acceptable salts
     RL: BSU (Biological study, unclassified); PAC (Pharmacological
     activity); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (carbocyclic nucleoside derivs. as inhibitors of RNA-dependent RNA
        viral polymerase)
     636583-01-2 HCAPLUS
RN
     1,2-Cyclopentanediol, 5-(6-amino-9H-purin-9-yl)-3-(hydroxymethyl)-1-methyl-
     , (2R, 3R, 5R) - (9CI) (CA INDEX NAME)
Absolute stereochemistry.
   NH_2
               HO
```

RN 636583-02-3 HCAPLUS

OH

R

CN 1,2-Cyclopentanediol, 5-(6-amino-9H-purin-9-yl)-3-(hydroxymethyl)-1-methyl-, (1S,2R,3R,5R)- (9CI) (CA INDEX NAME)

RN 636583-03-4 HCAPLUS

CN 6H-Purin-6-one, 2-amino-9-[(1R,3R,4R)-2,3-dihydroxy-4-(hydroxymethyl)-2-methylcyclopentyl]-1,9-dihydro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 636583-04-5 HCAPLUS

CN 6H-Purin-6-one, 2-amino-9-[(1R,2S,3R,4R)-2,3-dihydroxy-4-(hydroxymethyl)-2-methylcyclopentyl]-1,9-dihydro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $H_2N$ 
 $H_3N$ 
 $H_4N$ 
 $H_5$ 
 $R$ 
 $R$ 
 $R$ 
 $R$ 
 $R$ 
 $R$ 
 $R$ 
 $R$ 

RN 636583-17-0 HCARLUS

CN Triphosphoric acid, P-[[(1R,2R,4R)-4-(6-amino-9H-purin-9-yl)-2,3-dihydroxy-3-methylcyclopentyl]methyl] ester (9CI) (CA INDEX NAME)

RN 636583-17-0 HCAPLUS

CN Triphosphoric acid, P-[[(1R,2R,4R)-4-(6-amino-9H-purin-9-yl)-2,3-dihydroxy-3-methylcyclopentyl]methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 636583-18-1 HCAPLUS

CN Triphosphoric acid, P-[[(1R,2R,3S,4R)-4-(6-amino-9H-purin-9-yl)-2,3-dihydroxy-3-methylcyclopentyl]methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 636583-19-2 HCAPLUS

CN Triphosphoric acid, P-[[(1R,2R,4R)-4-(2-amino-1,6-dihydro-6-oxo-9H-purin-9-yl)-2,3-dihydroxy-3-methylcyclopentyl]methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $N$ 
 $H_2N$ 
 $H_3N$ 
 $H_4$ 
 $H_5$ 
 $H_6$ 
 $H_6$ 
 $H_7$ 
 $H_8$ 
 $H_8$ 
 $H_8$ 
 $H_8$ 
 $H_8$ 
 $H_8$ 
 $H_9$ 
 $H_9$ 

RN 636583-19-2 HCAPLUS

CN Triphosphoric acid, P-[[(1R,2R,4R)-4-(2-amino-1,6-dihydro-6-oxo-9H-purin-9-yl)-2,3-dihydroxy-3-methylcyclopentyl]methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 636583-20-5 HCAPLUS

CN Triphosphoric acid, P-[[(1R,2R,3S,4R)-4-(2-amino-1,6-dihydro-6-oxo-9H-purin-9-yl)-2,3-dihydroxy-3-methylcyclopentyl]methyl] ester (9CI) (CA INDEX NAME)

RN 636583-20-5 HCAPLUS

CN Triphosphoric acid, P-[[(1R,2R,3S,4R)-4-(2-amino-1,6-dihydro-6-oxo-9Hpurin-9-yl)-2,3-dihydroxy-3-methylcyclopentyl]methyl] ester (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $H_2N$ 
 $H_3$ 
 $H_4$ 
 $H_5$ 
 $H_5$ 
 $H_6$ 
 $H_6$ 
 $H_7$ 
 $H_8$ 
 $H_8$ 
 $H_8$ 
 $H_9$ 
 $H_$ 

L24 ANSWER 11 OF 41 HCARLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:935820 HCAPLUS

DOCUMENT NUMBER: 140:156738

TITLE: Characterization of Resistance to Non-obligate

Chain-terminating Ribonucleoside Analogs That Inhibit

Hepat\itis C Virus Replication in Vitro

AUTHOR(S): Migliaccio, Giovanni; Tomassini, Joanne E.; Carroll,

Steven S.; Tomei, Licia; Altamura, Sergio; Bhat, Balkrishen; Bartholomew, Linda; Bosserman, Michele R.;

Ceccacci, Alessandra; Colwell, Lawrence F.; Cortese, Riccardo; De Francesco, Raffaele; Eldrup, Anne B.; Getty, Krista L.; Hou, Xiaoli S.; LaFemina, Robert L.;

Ludmerer, Steven W.; MacCoss, Malcolm; McMasters, Daniel R.; Stahlhut, Mark W.; Olsen, David B.; Hazuda,

Daria J.; Flores, Osvaldo A.

CORPORATE SOURCE: Department of Riochemistry, Istituto di Ricerche di

Biologia Molecolare P. Angeletti, Pomezia, 00040,

Italy

SOURCE: Journal of Biological Chemistry (2003), 278(49),

49164-49170

Searched by Paul Schulwitz

(571)272-2527

PUBLISHER:

CODEN: JBCHA3; ISSN: 0021-9258

American Society for Biochemistry and Molecular

Biology Journal English

DOCUMENT TYPE: LANGUAGE:

The urgent need for efficacious drugs to treat chronic hepatitis C virus AB (HCV) infection requires a concerted effort to develop inhibitors specific for virally encoded enzymes. We demonstrate that 2'-C-Me ribonucleosides are efficient chain-terminating inhibitors of HCV genome replication. Characterization of drug-resistant HCV replicons defined a single S282T mutation within the active site of the viral polymerase that conferred loss of sensitivity to structurally related compds. in both replicon and isolated polymerase assays. Biochem. analyses demonstrated that resistance at the level of the enzyme results from a combination of reduced affinity of the mutant polymerase for the drug and an increased ability to extend the incorporated nucleoside analog. Importantly, the combination of these agents with interferon-α results in synergistic inhibition of HCV genome replication in cell culture. Furthermore, 2'-C-methyl-substituted ribonucleosides also inhibited replication of genetically related viruses such as bovine diarrhea virus, yellow fever, and West African Nile viruses. These observations, together with the finding that 2'-C-methyl-quanosine in particular has a favorable pharmacol. profile, suggest that this class of compds. may have broad utility in the treatment of HCV and other flavivirus infections.

IT 374750-30-8

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(characterization of resistance to non-obligate chain-terminating ribonucleoside analogs that inhibit hepatitis C virus replication in vitro)

RN 374750-30-8 HCAPLUS

CN Guanosine, 2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 15397-12-3

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(characterization of resistance to non-obligate chain-terminating ribonucleoside analogs that inhibit hepatitis C virus replication in vitro)

RN 15397-12-3 HCAPLUS

CN Adenosine, 2'-C-methyl- (8CI, 9CI) (CA INDEX NAME)

```
REFERENCE COUNT:
                         27
                               THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L24 ANSWER 12 OF 41
                      HCAPLUS
                               COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER
                         2003:796878 HCAPLUS
DOCUMENT NUMBER:
                         139:306530
                         Flt3-ligand for enhancing immune response of vaccine
TITLE:
                         against cancer, allergy and infection
                         Mckenna, Hilary J.; Liebowitz, David N.; Maliszewski,
INVENTOR(S):
                         Charles R.
                         Immunex Corporation, USA
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 96 pp.
SOURCE:
                         CODEN: PIXXD2
                         Patent
DOCUMENT TYPE:
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
                         1
PATENT INFORMATION:
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                                            DATE
                       A2
     WO 2003083083
                            20031009
                                           WO 2003-US9773
                                                             20030326
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID,\IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, ŒE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, ŠĶ, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
     US 2004022760
                       A1
                            20040205
                                           US 2003-401364
                                                             20030326
PRIORITY APPLN. INFO.:
                                        US 2002-368263P P
                                                            20020326
                                        US 2002-427835P P 20021119
    The present invention relates to\methods of using Flt3-ligand (Flt3-L) in
AB
     immunization protocols to enhance\immune responses against vaccine
     antigens. Embodiments include administering Flt3-ligand prior to
     immunizing a subject with a vaccine, wherein the vaccine comprises at
     least one antigen formulated in one\or more adjuvants. Methods of
    treating and preventing cancer, allergy and infection using Flt3-ligand
     immunization protocols are also provided. Methods of using Flt3-ligand
     immunization protocols for in vivo evaluation of antigens and adjuvants
    are also provided.
```

CMF (C9 H13 N2 O9 P)x CCI PMS

27416-86-0

CM 2

CRN

CRN 58-97-9 CMF C9 H13 N2 O9 P

Absolute stereochemistry.

CM 3

CRN 24937-83-5

CMF (C10 H14 N5 O7 P)x

CCI PMS

CM 4

CRN 61-19-8

CMF C10 H14 N5 O7 P

Absolute stereochemistry.

RN 121288-39-9 HCAPLUS

CN Guanosine, 7,8-dihydro-8-oxo-7-(2-propenyl)- (9CI) (CA INDEX NAME)

L24 ANSWER 13 OF 41 HCAPLUS / COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003 / 757325 HCAPLUS

DOCUMENT NUMBER: 139:286307

TITLE: Antimicrobial sulfated polysaccharides that exhibit

resistance to lysosomal degradation during kidney filtration and renal passage, compositions, and

methods of use

INVENTOR(S): Comper, Wayne D.

PATENT ASSIGNEE(S): USA

SOURCE: U.\$. Pat. Appl. Publ., 33 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

```
KIND
                             DATE
                                            APPLICATION NO.
     PATENT NO.
                                                              DATE
                             20,030925
                                            US 2002-321756
     US 2003181416
                       A1
                                                              20021217
                                            US 2003-421687
                             20040115
     US 2004009953
                       A1
                                                              20030423
                             20040219
     WO 2004014400
                       A1
                                            WO 2003-AU488
                                                              20030424
                             AT,\AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
         W: AE, AG, AL, AM,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, N, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
                                         US\ 2002-346629P
PRIORITY APPLN. INFO.:
                                                              20020110
                                         US \2002-366532P P
                                                              20020325
                                         US 2002-366533P P 20020325
                                         US 2\002-402695P P 20020813
                                         US 2002-321756
                                                           A2 2<del>002</del>1217
```

AB The invention provides methods and compast for treating or preventing microbial infection in mammals with sulfated polysaccharides, in which the polysaccharides have a degree of sulfation effective to enable maximal interaction of constituent sulfate groups with the microbe which causes the infection, and in which the sulfated polysaccharide is not

```
substantially endocytosed or degraded by cell receptor binding in the
     mammal and thereby retains antimicrobial activity in vivo.
     24939-03-5, Polyinosinic-polycytidylic acid
IT
     RL: PAC (Pharmacological activity); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (antimicrobial sulfated polysaccharides that exhibit resistance to
        lysosomal degradation during kidney filtration and renal passage, compns.,
        and methods of use)
     24939-03-5 HCAPLUS
RN
     5'-Inosinic acid, homopolymer, complex with 5'-cytidylic acid homopolymer
CN
     (1:1) (9CI) (CA INDEX NAME)
     CM
          1
         30918-54-8
     CRN
     CMF (C10 H13 N4 O8 P)x
     CCI PMS
          CM
               2
          CRN 131-99-7
          CMF C10 H13 N4 O8 P
```

L24 ANSWER 14 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:714459 HCAPLUS

DOCUMENT NUMBER: 140:287630

5'-O-Fluorosulfonylbenzoyl Esters of Purine TITLE:

Nucleosides as Potential Inhibitors of NTPase/Helicase

and Polymerase of Flaviviridae Viruses

AUTHOR (S): Bretner, M.; Schalinski, S.; Borowski, P.; Kulikowski,

T.

Institute of Biochemistry and Biophysics, Laboratory CORPORATE SOURCE:

of Antimetabolites, Polish Academy of Sciences,

Warsaw, 02-106, Pol.

Nucleosides, Nucleotides & Nucleic Acids (2003), SOURCE:

22(5-8), 1531-1533

CODEN: NNNAFY; ISSN: 1525-7770

Marcel Dekker, Inc.

Journal DOCUMENT TYPE:

English LANGUAGE:

Synthesis and interactions of guanosine, inosine and ribavirin AB5'-fluorosulfonyl-benzoyl esters with hepatitis C virus (HCV) and

Flaviviruses NTPase/helicase and polymerase are described.

68267-13-0P 83133-70-4P IT

RL: PAC (Pharmacological activity); SPN (Synthetic preparation);

BIOL (Biological study); PREP (Preparation)

(fluorosulfonylbenzoyl esters of purine nucleosides as potential inhibitors of ntpase helicase and polymerase of flaviviridae viruses)

68267-13-0 **HCAPLUS** RN

PUBLISHER:

Guanosine, 5'-[4-(fluorosulfonyl)benzoate] (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

83133-70-4 HCAPLUS RN

Inosine, 5'-[4-(fluorosulfonyl)benzoate] (9CI) CN(CA INDEX NAME)

```
R
                   S
             HO
                       OH
REFERENCE COUNT:
                                THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
```

L24 ANSWER 15 OF 41

ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

INVENTOR(S):

SOURCE:

PATENT ASSIGNEE(S):

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HOAPLUS COPYRIGHT 2004 ACS on STN 2003:492694 HCAPLUS

139:47125

Induction of viral mutation by incorporation of miscoding ribonucleoside analogs into viral RNA, and drug screening method

Loeb, Lawrence A.; Mullins, James I.

USA

U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S.

Ser. No. 958,065.

CODEN: USXXCO

Patent English

2

KIND PATENT NO. DATE APPLICATION NO. DATE US 2003119764 US 2000-522373 20030626 20000310 US 6063628 20000516 US 1997-958065 A 19971027 PRIORITY APPLN. INFO.: US 1996-29404P P 19961028 US 1997-40535P P 19970227 US 1997-958065 A2 19971027

The present invention is directed to the identification and use of ABribonucleoside analogs to induce the mutation of an RNA virus, including BVDV, HIV and HCV, or a virus which otherwise replicates through an RNA The increase in the mutation rate of the virus results in intermediate. reduced viability of progeny generations of the virus, thereby inhibiting viral replication. In addition to these methods and related compns., the invention provides methods and combinatorial chemical libraries for screening ribonucleoside analogs for mutagenic potential.

58-61-7D, Adenosine, derivs. 118-00-3D, Guanosine, ITderivs. 1867-73-8 1867-73-8D, derivs. 3868-31-3, 8-Hydroxyguanosine 3868-31\(\)-3D, 8-Hydroxyguanosine, derivs. 3868-32-4 \(\lambda\) 8-Aminoguanosine 3868-32-4D, 8-Aminoguanosine, derivs. 7803-88-5 7803-88-5D, derivs. 39007-51-7 39007-51-7D, derivs. 39007-52-8 39007-52-8D, derivs. 39708-01-5 39708-01-5D, derivs. 72055-62-0,

Absolute stereochemistry.

RN 118-00-3 HCAPLUS CN Guanosine (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 1867-73-8 HCAPLUS CN Adenosine, N-methyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

RN 1867-73-8 HCAPLUS

CN Adenosine, N-methyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 3868-31-3 HCAPLUS

CN Guanosine, 7,8-dihydro-8-oxo- (9CI) (CA INDEX NAME)

Absolute\stereochemistry.

RN 3868-31-3 HCAPLUS

CN Guanosine, 7,8 dihydro-8-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 3868-32-4 HCAPLUS

CN Guanosine, 8-amino- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Searched by Paul Schulwitz (571)272-2527

Page 37

RN 3868-32-4 HCAPLUS

CN Guanosine, 8-amino- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 7803-88-5 HCAPLUS

CN Guanosine, &-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 7803-88-5 HCAPLUS

CN Guanosine, 6-O-methyl- (9CI) (CA INDEX NAME)

RN 39007-51-7 HCAPLUS

CN 3H-Imidazo[2,1-i]purine, 3-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 39007-51-7 HCAPLUS

CN 3H-Imidazo[2,1-i]purine, 3-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 39007-52-8 HCAPLUS

CN Imidazo[1,2-c]pyrimidin-5(6H)-one, 6-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

RN 39007-52-8 HCAPLUS

CN Imidazo[1,2-c]pyrimidin-5(6H)-one, 6-β-D-ribofuranosyl- (9CI) (CI INDEX NAME)

Absolute stereochemistry.

RN 39708-01-5 HCAPLUS

CN Guanosine, 6-O-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 39708-01-5 HCAPLUS

CN Guanosine, 6-O-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 72055-62-0 HCAPLUS

CN Adenosine, 3-methyl- (9CI) (CA INDEX NAME)

RN 72055-62-0 HCAPLUS

CN Adenosine, 3-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 82773-20-4 HCAPLUS

CN Guanosine, 6-0-(1-methylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 82773-20-4 HCAPLUS

CN Guanosine, 6-O-(1-methylethyl)- (9CI) (CA INDEX NAME)

RN 108060-85-1 HCAPLUS

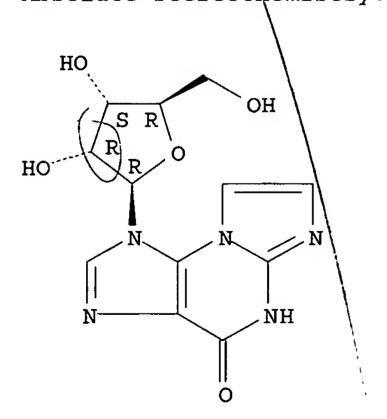
CN 1H-Imidazo[2,1-b]purin-4(5H)-one, 1-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 108060-85-1 HCAPLUS

CN 1H-Imidazo[2,1-b]purin-4(5H)-one, 1-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 16 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

```
ACCESSION NUMBER:
                         2003:301196 HCAPLUS
DOCUMENT NUMBER:
                         138:297636
                         Use of STAT-6 inhibitors as therapeutic agents
TITLE:
INVENTOR(S):
                         Carson, Dennis A.; Cottam, Howard B.; Leoni, Lorenzo
                         M.; Barchechath, Sylvie
PATENT ASSIGNEE(S):
                         The Regents of the University of California, USA
                         PCT Int. Appl., 62 pp.
SOURCE:
                         CODEN: PIXXD2
                         Patent
DOCUMENT TYPE:
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
     WO 2003031587
                                           WO 2002-US32503 20021009
                       A2
                            20030417
                       A3
     WO 2003031587
                            20040219
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
                       Al
                            20030731
                                           US 2002-269110
     US 2003143199
                                                             20021009
PRIORITY APPLN. INFO.:
                                        US 2001-328162P P 20011009
                                        US 2001-328689P P 20011010
OTHER SOURCE(S):
                         MARPAT 138:297636
     The invention provides therapeutic method to enhance the efficacy of
AB
     interferon treatment comprising administering to a mammal subject to
     interferon treatment a compound which is an antagonist of the IL-4 or IL-13
     signal transduction pathway in an amount effective to enhance said efficacy.
     The method includes treatment of diseases such as cancer, proliferative
     fibrotic diseases, viral diseases, or autoimmune diseases. The invention
     also includes the use of chemotherapeutic agents, radiation or other
     treatments in conjunction with the method of the invention.
     21679-14-1, Fludarabine
IT
     RL: PAC (Pharmacological activity); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (use of STAT-6 inhibitors as therapeutic agents)
     21679-14-1 HCAPLUS
RN
     9H-Purin-6-amine, 9-β-D-arabinofuranosyl-2-fluoro- (9CI) (CA INDEX
CN
     NAME)
```

```
HCAPLUS COPYRIGHT 2004 ACS on STN
    ANSWER 17 OF 41
                         2003:261692 HCAPLUS
ACCESSION NUMBER:
                         /138:265611
DOCUMENT NUMBER:
                         Methods and compositions for treating
TITLE:
                         flaviviruses and pestiviruses using
                         4'-modified nucleosides, and preparation thereof
INVENTOR(S):
                         Gosselin, Gilles; Imbach, Jean-Louis; Sommadossi,
                         Jean-Pierre
PATENT ASSIGNEE(S):
                         Idenix (Cayman) Limited, Cayman I.; Centre National de
                         la Recherche Scientifique; L'Universite Montpellier II
                         PCT Int. Appl., 159 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                     \KIND
                            DATE
                                           APPLICATION NO.
                                                             DATE
                                           WO 2002-US31203
     WO 2003026675
                      \A1
                            20030403
                                                             20020930
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, ČZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD_x SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
    US 2004006002
                            20040108
                                           US 2002-261327
                       A1
                                                             20020930
PRIORITY APPLN. INFO.:
                                        US 2001-326192P P 20010928
                         MARPAT 138:265611
OTHER SOURCE(S):
     A method and composition are provided for treating a host infected with
AB
     flavivirus or pestivirus, comprising administering an effective
     amount of a 4'-modified nucleoside,\or a pharmaceutically acceptable salt or
    prodrug thereof. Preparation of nucleoside derivs. is described.
     152540-76-6 152540-76-6D, prodrug dekivs.
IT
     153186-32-4 153186-32-4D, prodrug der vs.
     503543-42-8 503543-42-8D, prodrug derivs.
     RL: PAC (Pharmacological activity); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (flavivirus and pestivirus infection\treatment using
        4'-modified nucleosides, and preparation thereof)
```

RN 152540-76-6 HCAPLUS

CN Adenosine, 4'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry./

RN 152540-76-6 HCAPLUS

CN Adenosine, 4'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 153186-32-4 HCAPLUS

CN Guanosine, 4'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $N$ 
 $R$ 
 $S$ 
 $Me$ 
 $OH$ 

RN 153186-32-4 HCAPLUS

CN Guanosine, 4'-C-methyl- (9CI) (CA INDEX NAME)

503543-42-8 HCAPLUS RN

Inosine, 4'-C-methyl- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

503543-42-8 HCAPLUS RN

Inosine, 4'-C-methyl- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 18 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

3

2003:1\3446 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

138:198576

TITLE:

Mutagenia nucleoside analogs for the treatment of

viral disease

INVENTOR(S):

Li, Ling; Gall, Alexander; Daifuku, Richard

PATENT ASSIGNEE(S):

Koronis Pharmaceuticals, Inc., USA

Searched by Paul Schulwitz (571)272-2527

SOURCE:

PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2002-US26765 WO 2003018030 A1 20030306 20020821 AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG **A1** US 2002-226799 20020821 20030911

US 2003170872 US 2001-314728P P 20010824 PRIORITY APPLN. INFO.: OTHER SOURCE(S): MARPAT 138:198576

The present invention provides a new strategy for inhibiting viral AB replication. In the methods of the invention, specified deoxyribonucleoside analogs and ribonucleoside analogs are used to dramatically increase the mutation rate of the virus. This increase in the mutation rate of the virus results in reduced viability of progeny generations of the virus, thereby inhibiting viral replication.

1818-71-9, Isoguanosine 2096-10-8, 2,6-Diaminopurine ITriboside

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mutagenic nucleoside analogs for treatment of viral disease)

1818-71-9 HCAPLUS RN

Adenosine, 1,2-dihydro-2-oxo- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

2096-10-8 HCAPLUS RN

Adenosine, 2-amino- (9CI) (CA INDEX NAME) CN

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2004 ACS on STN L24 ANSWER 19 OF 41

2003:101583 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 139:46469

Interferons, interferon inducers, and TITLE:

> interferon-ribavirin in treatment of flavivirus-induced encephalitis in mice

AUTHOR(S): Leyssen, Pieter; Drosten, Christian; Paning, Marcus;

Charlier, Nathalie; Paeshuyse, Jan; De Clercq, Erik;

Neyts, Johan

Rega Institute for Medical Research, Katholieke CORPORATE SOURCE:

Universiteit Leuven, Louvain, B-3000, Belg.

Antimicrobial Agents and Chemotherapy (2003), 47(2), SOURCE:

777-782

CODEN: AMACCQ; ISSN: 0066-4804 American Society for Microbiology

Journal DOCUMENT TYPE: English LANGUAGE:

PUBLISHER:

We evaluated the prophylactic and therapeutic efficacy of interferon AB  $\alpha$ -2b, pegylated interferon  $\alpha$ -2b, poly(I  $\cdot$  C), and Ampligen against Modoc virus encephalitis in an animal model for flavivirus infections. All compds. significantly delayed virus-induced morbidity (paralysis) and mortality (due to progressive encephalitis). Viral load (as measured on day 7 postinfection) was significantly reduced by 80 to 100% in the serum, brain, and spleen in mice that had been treated with either interferon  $\alpha$ -2b, pegylated interferon  $\alpha$ -2b, poly(I · C), or Ampligen. We also studied whether a combination of interferon  $\alpha$ -2b and ribavirin (presently the standard therapy for the treatment of infections with hepatitis C virus) would be more effective than treatment with interferon alone. However, ribavirin did not enhance the inhibitory effect of interferon therapy in this animal model for flavivirus infections.

24939-03-5, Poly(I · C) 38640-92-5, Ampligen  ${ t IT}$ 

RL: PAC (Pharmacological activity); THU (Therapeutic

use); BIOL (Biological study) ∧ USES (Uses)

(interferons, interferon inducers, and interferon-ribavirin in

treatment of flavivirus-induced encephalitis)

24939-03-5 HCAPLUS RN

5'-Inosinic acid, homopolymer, complex with 5'-cytidylic acid homopolymer CN(1:1) (9CI) (CA INDEX NAME)

1

CM

CRN 30918-54-8

CMF (C10 H13 N4 O8 P)x CCI PMS CM 2 CRN 131-99-7 CMF C10 H13 N4 O8 P

Absolute stereochemistry.

CM 3

CRN 30811-80-4 CMF (C9 H14 N3 O8 P)x CCI PMS

CM 4

CRN 63-37-6 CMF C9 H14 N3 O8 P

Absolute stereochemistry.

RN 38640-92-5 HCAPLUS

CN 5'-Inosinic acid, homopolymer, complex with 5'-cytidylic acid polymer with 5'-uridylic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 30918-54-8 CMF (C10 H13 N4 O8 P)x CCI PMS

CM 2

CRN 131-99-7 CMF C10 H13 N4 O8 P

Absolute stereochemistry.

CM 3

CRN 26427-29-2

CMF (C9 H14 N3 O8 P . C9 H13 N2 O9 P) $\times$ 

CCI PMS

CM 4

CRN 63-37-6

CMF C9 H14 N3 O8 P

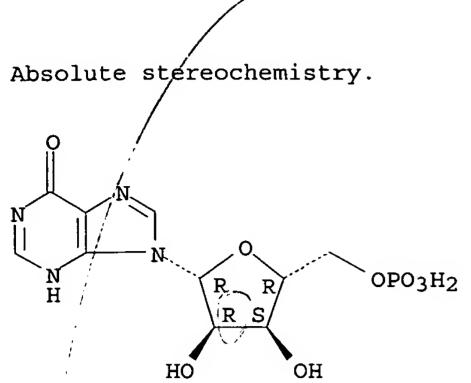
Absolute stereochemistry.

CM 5

CRN 58-97-9

CMF C9 H13 N2 O9 P

```
. 35
                               THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L24 ANSWER 20 OF 41
                      HCAPLUS
                              COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                         2002:832613 HCAPLUS
DOCUMENT NUMBER:
                         137:333119
                         3-Aminopyridine-2-carboxyaldehyde thiosemicarbazones
TITLE:
                         and methods using them for treating viral and fungal
                         infections
                         King, Ivan C.; Doyle, Terrence W.; Sznol, Mario;
INVENTOR(S):
                         Sartorelli, Alan C.; Cheng, Yung-Chi
                         Vion Pharmaceuticals, Inc., USA; Yale University
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 68 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                           APPLICATION NO.
     PATENT NO.
                      KIND
                            DATE
                                                            DATE
     WO 2002085358
                       A2
                            20021031
                                           WO 2002-US12358
                                                            20020418
     WO 2002085358
                       A3
                            20021219
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2002188011
                       A1
                            20021212
                                           US 2002-126050
                                                            20020418
PRIORITY APPLN. INFO.:
                                        US 2001-285559P P 20010420
                         MARPAT 137:333119
OTHER SOURCE(S):
     The invention provides methods for treating viral or fungal infections
AB
     using 3-aminopyridine-2-carboxyaldehyde thiosemicarbazone (3-AP) and
     3-amino-4-methylpyridine-2-carboxaldehyde thiosemicarbazone (3-AMP), and
     prodrug forms thereof, as well as pharmaceutical compns. comprising these
     compds. Preparation of compds. of the invention is described.
     38640-92-5, Ampligen
IT
     RL: PAC (Pharmacological activity); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (aminopyridinecarboxyaldehyde thiosemicarbazones for treatment of viral
        and fungal infections)
     38640-92-5 HCAPLUS
RN
     5'-Inosinic acid, homopolymer, complex with 5'-cytidylic acid polymer with
CN
     5'-uridylic acid (1:1) (9CI) (CA INDEX NAME)
     CM
          1
         30918-54-8
     CRN
     CMF (C10 H13 N4 O8 P)x
     CCI PMS
               2
          CM
          CRN 131-99-7
          CMF C10 H13 N4 O8 P
```



CM 3

CRN 26427-29-2

HO

(C9 H14 N3 O8 P . C9 H13 N2 O9 P)x  ${\sf CMF}$ 

CCI PMS

> CM4

CRN 63-37-6

CMF C9 H14 N3 O8 P

Absolute stereochemistry.

McIntosh 10/602,693 L24 ANSWER 21 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN ACCESSION NUMBER: 2002:584808 HCAPLUS DOCUMENT NUMBER: 137:276900 Infection of SCID mice with Montana myotis TITLE: leukoencephalitis virus as a model for flavivirus encephalitis Charlier, Nathalie; Leyssen, Pieter; Paeshuyse, Jan; AUTHOR(S): Drosten, Christian; Schmitz, Herbert; Van Lommel, Alfons; De Clercq, Erik; Neyts, Johan Laboratory of Virology and Chemotherapy, Rega CORPORATE SOURCE: Institute for Medical Research, Louvain, B-3000, Belg. Journal of General Virology (2002), 83(8), 1887-1896 SOURCE: CODEN: JGVIAY; ISSN: 0022-1317 Society for General Microbiology PUBLISHER: DOCUMENT TYPE: Journal English LANGUAGE: We have established a convenient animal model for flavivirus ABencephalitis using Montana Myotis leukoencephalitis virus (MMLV), a bat flavivirus. This virus has the same genomic organization, and contains the same conserved motifs in genes that encode potential antiviral targets, as flaviviruses that cause disease in man (Charlier, N., et al., 2002), and has a similar particle size (approx. 40 nm). MMLV replicates well in Vero cells and appears to be equally as sensitive as yellow fever virus and dengue fever virus to a selection of exptl. antiviral agents. Cells infected with MMLV show dilation of the endoplasmic reticulum, a characteristic of flavivirus infection. I.p., intranasal or direct intracerebral inoculation of SCID mice with MMLV resulted in encephalitis ultimately leading to death, whereas immunocompetent mice were refractory to either intranasal or i.p. infection with MMLV. Viral RNA and/or antigens were detected in the brain and serum of MMLV-infected SCID mice, but not in any other organ examined: MMLV was detected in the olfactory lobes, the cerebral cortex, the limbic structures, the midbrain, cerebellum and medulla oblongata. Infection was confined to neurons. Treatment with the interferon- $\alpha/\beta$  inducer poly(I) · poly(C) protected SCID mice against MMLV-induced morbidity and mortality, and this protection correlated with a reduction in infectious virus titer and viral RNA load. This validates the MMLV model for use in antiviral drug studies. The MMLV SCID model may, therefore, be attractive for the study of chemoprophylactic or chemotherapeutic strategies against flavivirus infections causing encephalitis. 24939-03-5, Poly(I) ·poly(C) ITRL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (infection of SCID mice with Montana myotis leukoencephalitis virus as model for **flavivirus** encephalitis) 24939-03-5 HCAPLUS RN5'-Inosinic acid, homopolymer, complex with 5'-cytidylic acid homopolymer CN(1:1) (9CI) (CA INDEX NAME) CM1 30918-54-8 CRN CMF (C10 H13 N4 O8 P)x CCI PMS

> 2 CM CRN 131-99-7 CMF C10 H13 N4 O8 P

Absolute stereochemistry.

Absolute stereochemistry.

REFERENCE COUNT: 54

THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 22 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:521462 HCAPLUS

DOCUMENT NUMBER: 137:88442

TITLE: Incensole and furanogermacrens and compounds in

treatment for inhibiting neoplastic lesions and

microorganisms

INVENTOR(S): Shanahan-Pendergast, Elisabeth

PATENT ASSIGNEE(S): Ire.

SOURCE: PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2002-IE1 WO 2002053138 A2 20020711 20020102 WO 2002053138 **A3** 20020919 W: AE, AG, AT, AU, BB, BG, CA, CH, CN, CO, CU, CZ, LU, LV, MA, MD, UA, UG, US, VN, YU, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, AT, BE, CH, CY, DE, ES, FI, ML, MR, NE, SN, TD, TG EP 1351678 20031015 EP 2002-727007 **A2** 20020102 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR US 2004092583 A1 20040513 US 2004-250535 20040102 PRIORITY APPLN. INFO.: IE 2001-2 A 20010102 WO 2002-IE1 W 20020102 OTHER SOURCE(S): MARPAT 137:88442 The invention discloses the use of incensole and/or furanogermacrens,  $\mathbf{AB}$ derivs. metabolites/and precursors thereof in the treatment of neoplasia, particularly resistant neoplasia and immundysregulatory disorders. These compds. can be administered alone or in combination with conventional chemotherapeutic, antiviral, antiparasite agents, radiation and/or surgery. Incensole and furanogermacren and their mixture showed antitumor activity against various human carcinomas and melanomas and antimicrobial activity against Staphylococcus aureus and Enterococcus faecalis. 5536-17-4, Vidarabine 29984-33-6, Vidarabine Phosphate IT51867-87-9 110143-10-7, Lodenosine RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical formulation further containing; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents) 5536-17-4 HCAPLUS, RN9H-Purin-6-amine, 9-β-D-arabinofuranosyl- (9CI) (CA INDEX NAME) CN Absolute stereochemistry ŅH2 ΟH HO OH 29984-33-6 **HCAPLUS** RNCN9H-Purin-6-amine, 9-(5-0-phosphono-β-D-arabinofuranosyl)- (9CI) INDEX NAME)

Searched by Paul Schulwitz (571)272-2527

RN 51867-87-9 HCAPLUS

CN 9H-Purin-6-amine, 9-(5-O-phosphono- $\beta$ -D-arabinofuranosyl)-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Na

Absolute stereochemistry.

1T 53-79-2, Puromycin 58-58-2, Puromycin Hydrochloride 7724-76-7, Riboprine 21679-14-1, Fludarabine 75607-67-9, Fludarabine Phosphate 121288-39-9, Loxoribine RL: PAC (Pharmacological activity); THU (Therapeutic

use); BIOL (Biological study); USES (Uses)

(pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

RN 53-79-2 HCAPLUS

CN Adenosine, 3'-[[(2S)-2-amino-3-(4-methoxyphenyl)-1-oxopropyl]amino]-3'-deoxy-N,N-dimethyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 58-58-2 HCAPLUS

CN Adenosine 3'-[[(2S)-2-amino-3-(4-methoxyphenyl)-1-oxopropyl]amino]-3'-deoxy-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 7724-76-7 HCAPLUS

CN Adenosine, N-(3-methyl\2-butenyl)- (7CI, 8CI, 9CI) (CA INDEX NAME)

RN 21679-14-1 HCAPLUS

CN 9H-Purin-6-amine, 9- $\beta$ -D-arabinofuranosyl-2-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 75607-67-9 HCAPLUS

CN 9H-Purin-6-amine, \2-fluoro-9-(5-O-phosphono-β-D-arabinofuranosyl)(9CI) (CA INDEX NAME)

Absolute stereochemistry

RN 121288-39-9 HCAPLUS

CN Guanosine, 7,8-dihydro-8-oxo-7-(2-propenyl)- (9CI) (CA INDEX NAME)

HCAPLUS COPYRIGHT 2004 ACS on STN L24 ANSWER 23 OF 41

ACCESSION NUMBER: 2002:466023 HCAPLUS

137:41715 DOCUMENT NUMBER:

Nucleotide derivatives and mycophenolic acid TITLE:

derivatives as antiviral agents for treatment of

Flaviviridae infections and abnormal cellular

proliferation, and preparation thereof

INVENTOR(S): Stuyver, Lieven; Pankiewicz, Krysztof W.; Patterson,

Steven; Otto, Michael J.; Watanabe, Kyoichi A.

Pharmasset Ltd., USA PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 165 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
KIND
     PATENT NO.
                            DATE
                                           APPLICATION NO.
                                                             DATE
     WO 2002048165
                       A2
                            20020620
                                           WO 2001-US49231
                                                             20011217
     WO 2002048165
                       A3
                            20030501
     WO 2002048165
                       C1
                            20031211
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2002032660
                       A5
                            20020624
                                           AU 2002-32660
                                                             20011217
                            20031203
                       A2
     EP 1366055
                                           EP 2001-992193
                                                             20011217
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.:
                                        US 2000-256066P P
                                                             20001215
                                        WO 2001-US49231 W 20011217
                         MARPAT 137:41715
```

OTHER SOURCE(S):

The invention discloses a composition for and a method of treating Flaviviridae (Hepacivirus, Flavivirus, Pestivirus)

infections, including BVDV and HCV, in a host, including animals, and especially

humans, using a nucleotide derivative or mycophenolic acid derivative or pharmaceutically acceptable salt or prodrug thereof. Methods using the compds. of the invention for the treatment of abnormal cellular

McIntosh 10/602,693

proliferation are also disclosed. 83285-83-0 83285-83-0D,/derivs. 102977-57-1 IT 102977-57-1D, derivs. 156724-91-3 156724-91-3D , derivs. 162870-11-3 162870-11-3D, derivs. 188413-10-7 188413-10-7D, derivs. 192137-89-6 192137-89-6D, derivs. 206540-15-0 206540-68-3 206540-68-3D, derivs. 244242-36-2 244242-36-2D , derivs. 437999-71-8 437999-71-8D, derivs. 437999-72-9 437999-72-9D, derivs. 437999-73-0 437999-73-0D, derivs. 437999-74-1 437999-74-1D , derivs. 437999-75-2 437999-75-2D, derivs. 437999-76-3 437999-76-3D, derivs. RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antiviral agents for treatment of Flaviviridae infections and abnormal cellular proliferation) 83285-83-0 HCAPLUS RNAdenosine 5'-(trihydrogen diphosphate), P'→5'-ester with CN2-β-D-ribofuranosyl-4-thiazolecarboxamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

NH2

NH2

NHO

OH

PAGE 1-B

RN 83285-83-0 HCAPLUS \
CN Adenosine 5'-(trihydrogen diphosphate), P'→5'-ester with 2-β-D-ribofuranosyl-4-thiazolecarboxamide (9CI) (CA INDEX NAME)

PAGE 1-B

-NH<sub>2</sub>

RN 102977-57-1 HCAPLUS

CN Adenosine, 5'-[hydrogen (phosphonomethyl)phosphonate], P'→5'-ester with 2-β-D-ribofuranosyl-4-thiazolecarboxamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

-NH<sub>2</sub>

RN 102977-57-1 HCAPLUS

CN Adenosine, 5'-[hydrogen (phosphonomethyl)phosphonate],  $P' \rightarrow 5'$ -ester with  $2-\beta-D$ -ribofuranosyl-4-thiazolecarboxamide (9CI) (CA INDEX NAME)

PAGE 1-B

 $-NH_2$ 

RN 156724-91-3 HCAPLUS

CN Adenosine 5'-(trihydrogen diphosphate), P' $\rightarrow$ 5'-ester with 3- $\beta$ -D-ribofuranosylbenzamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

 $-NH_2$ 

RN 162870-11-3 HCAPLUS

CN 4-Thiazolecarboxamide, 2-[5-0-[hydroxy(phosphonooxy)phosphinyl]- $\beta$ -D-ribofuranosyl]-, P' $\rightarrow$ 5'-ester with 9-(2-deoxy-2-fluoro- $\beta$ -D-arabinofuranosyl)-9H-purin-6-amine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 162870-11-3 HCAPLUS

CN 4-Thiazolecarboxamide, 2-[5-0-[hydroxy(phosphonooxy)phosphinyl]- $\beta$ -D-ribofuranosyl]-, P' $\rightarrow$ 5'-ester with 9-(2-deoxy-2-fluoro- $\beta$ -D-arabinofuranosyl)-9H-purin-6-amine (9CI) (CA INDEX NAME)

PAGE 1-B

-NH<sub>2</sub>

RN 188413-10-7 HCAPLUS

CN Adenosine, 5'-[hydrogen (phosphonomethyl)phosphonate],  $P' \rightarrow 5'$ -ester with 3- $\beta$ -D-ribofuranosylbenzamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

-NH<sub>2</sub>

RN 188413-10-7 HCAPLUS

CN Adenosine, 5'-[hydrogen (phosphonomethyl)phosphonate], P' $\rightarrow$ 5'-ester with 3- $\beta$ -D-ribofuranosylbenzamide (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

 $-NH_2$ 

RN 192137-89-6 HCAPLUS

CN Adenosine, 5'-[hydrogen (difluorophosphonomethyl)phosphonate],
P'→5'-ester with 2-β-D-ribofuranosyl-4-thiazolecarboxamide
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

OH

PAGE 1-B

 $-NH_2$ 

RN 192137-89-6 HCAPLUS

HO

CN Adenosine, 5'-[hydrogen (difluorophosphonomethyl)phosphonate],  $P' \rightarrow 5'$ -ester with 2- $\beta$ -D-ribofuranosyl-4-thiazolecarboxamide (9CI) (CA INDEX NAME)

Benzamide, 3-[5-0-[hydroxy(phosphonomethyl)phosphinyl]- $\beta$ -D-CNribofuranosyl]-, P' $\rightarrow$ 5'-ester with 9-(2-deoxy-2-fluoro- $\beta$ -Darabinofuranosyl)-9H-purin-6-amine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

-NH<sub>2</sub>

RN206540-68-3 HCAPLUS

Adenosine, 5'-[hydrogen (difluorophosphonomethyl)phosphonate], CN $P' \rightarrow 5'$ -ester with  $3-\beta$ -D-ribofuranosylbenzamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

-NH<sub>2</sub>

RN 206540-68-3 HCAPLUS

CN Adenosine, 5'-[hydrogen (difluorophosphonomethyl)phosphonate], P' $\rightarrow$ 5'-ester with 3- $\beta$ -D-ribofuranosylbenzamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

-NH<sub>2</sub>

RN 244242-36-2 HCAPLUS

CN Adenosine, 5'-[hydrogen [[[2-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-

oxo-5-isobenzofuranyl)ethoxy]hydroxyphosphinyl]methyl]phosphonate] (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 244242-36-2 HCAPLUS

CN Adenosine, 5'-[hydrogen [[[2-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5-isobenzofuranyl)ethoxy]hydroxyphosphinyl]methyl]phosphonate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 437999-71-8 HCAPLUS

CN Adenosine, 5'-ester with thiodiphosphoric acid ([(HO)2P(O)]2S), P' $\rightarrow$ 5'-ester with 3- $\beta$ -D-ribofuranosylbenzamide (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

-NH<sub>2</sub>

RN 437999-71-8 HCAPLUS

CN Adenosine, 5'-ester with thiodiphosphoric acid ([(HO)2P(O)]2S), P' $\rightarrow$ 5'-ester with 3- $\beta$ -D-ribofuranosylbenzamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

-NH<sub>2</sub>

RN 437999-72-9 HCAPLUS

CN Adenosine, 5'-[hydrogen (fluorophosphonomethyl)phosphonate], P' $\rightarrow$ 5'-ester with 3- $\beta$ -D-ribofuranosylbenzamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

-NH<sub>2</sub>

RN 437999-72-9 HCAPLUS

CN Adenosine, 5'-[hydrogen (fluorophosphonomethyl)phosphonate], P' $\rightarrow$ 5'-ester with 3- $\beta$ -D-ribofuranosylbenzamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

 $-NH_2$ 

RN 437999-73-0 HCAPLUS

CN Adenosine, 5'-ester with thiodiphosphoric acid ([(HO)2P(O)]2S), P' $\rightarrow$ 5'-ester with 2- $\beta$ -D-ribofuranosyl-4-thiazolecarboxamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

-NH<sub>2</sub>

RN 437999-73-0 HCAPLUS
CN Adenosine, 5'-ester with thiodiphosphoric acid ([(HO)2P(O)]2S),
P'→5'-ester with 2-β-D-ribofuranosyl-4-thiazolecarboxamide
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

-NH<sub>2</sub>

RN 437999-74-1 HCAPLUS
CN Adenosine, 5'-[hydrogen (fluorophosphonomethyl)phosphonate],

P' $\rightarrow$ 5'-ester with 2- $\beta$ -D-ribofuranosyl-4-thiazolecarboxamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HO

OH

PAGE 1-B

-NH<sub>2</sub>

RN 437999-74-1 HCAPLUS
CN Adenosine, 5'-[hydrogen (fluorophosphonomethyl)phosphonate],
P'→5'-ester with 2-β-D-ribofuranosyl-4-thiazolecarboxamide
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

-NH<sub>2</sub>

RN 437999-75-2 HCAPLUS CN Adenosine, 2-amino-, 5'-[hydrogen (phosphonomethyl)phosphonate], P' $\rightarrow$ 5'-ester with 3- $\beta$ -D-ribofuranosylbenzamide (9CI) (CA INDEX

NAME)

Absolute stereochemistry.

PAGE 1-B

RN 437999-75-2 HCAPLUS

CN Adenosine, 2-amino-, 5'-[hydrogen (phosphonomethyl)phosphonate], P' $\rightarrow$ 5'-ester with 3- $\beta$ -D-ribofuranosylbenzamide (9CI) (CA INDEX NAME)

RN 437999-76-3 HCAPLUS

CN Adenosine, 5'-[hydrogen [[[4-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5-isobenzofuranyl)-2-methyl-2-butenyl]oxy]hydroxyphosphinyl]methyl]pho sphonate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 437999-76-3 HCAPLUS

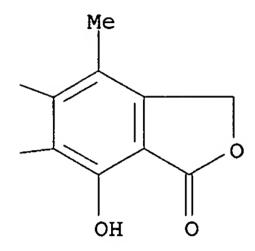
CN Adenosine, 5'-[hydrogen [[[4-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5-isobenzofuranyl)-2-methyl-2-butenyl]oxy]hydroxyphosphinyl]methyl]pho sphonate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

May 26, 2004

PAGE 1-A

PAGE 1-B



L24 ANSWER 24 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:458415 HCAPLUS

DOCUMENT NUMBER: 138:100377

TITLE: Identification of active antiviral compounds against a

New York isolate of West Nile virus

AUTHOR(S): Morrey, John D.; Smee, Donald F.; Sidwell, Robert W.;

Tseng, Christopher

CORPORATE SOURCE: Department of Animal, Dairy, and Veterinary Sciences,

Institute for Antiviral Research, Utah State

University,\Logan, UT, 84322-4700, USA

SOURCE: Antiviral Résearch (2002), 55(1), 107-116

CODEN: ARSRDR; ISSN: 0166-3542

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

The recent West Nile virus (WNV) dutbreak in the United States has ABincreased the need to identify effective therapies for this disease. A chemotherapeutic approach may be a reasonable strategy because the virus infection is typically not chronic and antiviral drugs have been identified to be effective in vitro against other flaviviruses. A panel of 34 substances was tested against infection of a recent New York isolate of WNV in Vero cells and active compds. were also evaluated in MA-104 cells. Some of these compds. Were also evaluated in Vero cells against the 1937 Uganda isolate of the WNV. Six compds. were identified to be effective against virus-induced CRE with 50% effective concns. (EC50) less than 10 μg/mL and with a selectivity index (SI) of greater than 10. Known inhibitors of orotidine monophosphate decarboxylase and inosine monophosphate dehydrogenase involved in the synthesis of GTP, UTP, and TTP were most effective. The compds. &-azauridine, 6-azauridine triacetate, cyclopententylcytosine (CPE-C), mycophenolic acid and pyrazofurin appeared to have the greatest activities against the New York

isolate, followed by 2-thio-6-azauridine. Anti-WNV activity of 6-azauridine was confirmed by virus yield reduction assay when the assay was performed 2 days after initial infection in Vero cells. The neutral red assay mean EC50 of ribavirin was only 106  $\mu g/mL$  with a mean SI of 9.4 against the New York isolate and only slightly more effective against the Uganda isolate. There were some differences in the drug sensitivities of the New York and Uganda isolates, but when comparisons were made by categorizing drugs according to their modes of action, similarities of activities between the two isolates were identified.

IT 102977-57-1

RL: PAC (Pharmacological activity); THU (Therapeutic

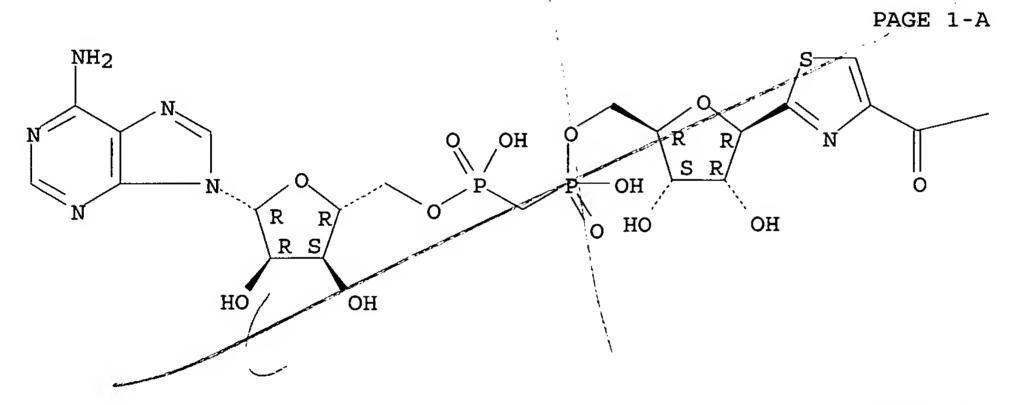
use); BIOL (Biological study); USES (Uses)

(identification of active antiviral compds. against a New York isolate of West Nile virus)

RN 102977-57-1 HCAPLUS

CN Adenosine, 5'-[hydrogen (phosphonomethyl)phosphonate], P'→5'-ester with 2-β-D-ribofuranosyl-4-thiazolecarboxamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



PAGE 1-B

-NH<sub>2</sub>

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 25 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:314958 HCAPLUS

DOCUMENT NUMBER: 136:340939

TITLE: Preparation of modified nucleosides for treatment of

viral infections and abnormal cellular proliferation

INVENTOR(S): Stuyver, Lieven; Watanabe, Kyoichi A.

PATENT ASSIGNEE(S): Pharmasset Limited, USA SOURCE: PCT Int. Appl., 230 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

```
PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                                            DATE
     WO 2002032920
                       A2
                            20020425
                                           WO 2001-US46113
                                                            20011018
     WO 2002032920
                      A3
                            20040219
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
            HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
            RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
            VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                     AU 2002-28749
                      A5
                            20020429
     AU 2002028749
                                                            20011018
     US 2003087873
                            20030508
                                         US 2001-45292
                       A1
                                                            20011018
                                         EP 2001-987756
                            20040428
                      A2
                                                            20011018
     EP 1411954
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI, CY, TR
                                        US 2000-241488P P
PRIORITY APPLN. INFO.:
                                                            20001018___
                                                            20010406
                                        US 2001-282156P P
                                        WO 2001-US46113 W 20011018
OTHER SOURCE(S):
                         MARPAT 136:340939
     Modified nucleosides, e.g. I, wherein D is hydrogen, alkyl, acyl,
AB
     monophosphate, diphosphate, triphosphate, monophosphate ester, diphosphate
     ester, triphosphate ester, phospholipid or amino acid; X is H, halogen,
     NH2, substituted amine, oxime, OH, alkoxy, SH, thioalkyl; Y is O, S, Se; R
     and R1 are independently H, alkyl, alkenyl, alkynyl, aryl, alkylaryl,
     halogen, NH2, substituted amine, oxime, hydrazine, OH, alkoxy, SH,
     thioalkyl, NO2, NO, CH2OH, CH2OH, ester, CONH2, amide, CN; R2 and R3 are
     independently H, halogen, OH, SH, OMe, SMe, NH2, NHMe, CH:CH2, CN, CH2NH2,
     CH2OH, CO2H; were prepared for treating a Flaviviridae (including
     BVDV and HCV), Orthomyxoviridae (including Influenza A and B) or
     Paramyxoviridae (including RSV) infection, or conditions related to
     abnormal cellular proliferation, in a host, including animals, and especially
             This invention also provides an effective process to quantify the
     viral load, and in particular BVDV, HCV or West Nile Virus load, in a
     host, using real-time polymerase chain reaction ("TR-PCR"). Addnl., the
     invention discloses probe mols. that can fluoresce proportionally to the
     amount of virus present in a sample. Thus, (1'R,2'S,3'R,4'R)-1-[2,3-
     dihydroxy-4-(hydroxymethyl)cyclopentan-1-yl]-5-fluorocytosine was prepared
     and tested in vitro as antiviral and antitumor agent.
     73-03-0P 2096-10-8P 3080-29-3P
\mathtt{IT}
     5399-87-1P 6982-08-7P 42867-78-7P
     75059-22-2P 100570-76-1P 103884-98-6P
     132722-95-3P 170157-95-6P 193754-19-7P
     210474-57-0P 221617-05-6P 405238-72-4P
     405238-74-6P 415705-27-0P 415705-29-2P
     415705-30-5P 415705-31-6P 415705-32-7P
     415705-33-8P 415705-84-9P
     RL: IMF (Industrial manufacture); PAC (Pharmacological activity)
     ; SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (preparation of modified nucleosides for treatment of viral infections and
        abnormal cellular proliferation)
     73-03-0 HCAPLUS
RN
     Adenosine, 3'-deoxy- (8CI, 9CI) (CA INDEX NAME)
CN
```

Absolute stereochemistry.

$$NH_2$$
 $NH_2$ 
 $NH_2$ 

RN 3080-29-3 HCAPLUS CN 9H-Purin-6-amine, 9-β-L-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 5399-87-1 HCAPLUS
CN 9H-Purine, 6-chloro-9-β-D-ribofuranosyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

RN 6982-08-7 HCAPLUS

CN 9H-Purine, 6-chloro-9-(3-deoxy-β-D-erythro-pentofuranosyl)- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 42867-78-7 HCAPLUS

CN 9H-Purin-6-amine, 9-(2-0-acetyl-3-bromo-3-deoxy-β-D-xylofuranosyl)(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 75059-22-2 HCAPLUS

CN Adenosine, 3'-deoxy-3'-fluoro- (9CI) (CA INDEX NAME)

RN

100570-76-1 HCAPLUS
9H-Purin-2-amine, 6,6'-dithiobis[9-β-D-ribofuranosyl- (9CI)
INDEX NAME) CN

Absolute stereochemistry.

PAGE 2-A

RN 103884-98-6 HCAPLUS

CN 6H-Purin-6-one, 2-amino-9-(2-deoxy-2-fluoro-β-D-arabinofuranosyl)-1,9dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 132722-95-3 HCAPLUS

CN 9H-Purine, 6-chloro-9-(2,3-dideoxy-2-fluoro-β-D-threo-pentofuranosyl)(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 170157-95-6 HCAPLUS

CN 9H-Purin-6-amine, 9-(3-deoxy-β-L-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 193754-19-7 HCAPLUS

CN 6H-Purin-6-one, 2-amino-9-(2-deoxy-2-fluoro-β-L-arabinofuranosyl)-1,9-

dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210474-57-0 HCAPLUS

CN 2-Furanmethanol, 5-(6/chloro-9H-purin-9-yl)-4-fluoro-2,5-dihydro-, (2R,5S)- (9CI) (CA L'NDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 221617-05-6 HCAPLUS

CN 2-Furanmethanol, 5-(6-amino-2-fluoro-9H-purin-9-yl)-4-fluoro-2,5-dihydro-, (2R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 405238-72-4 HCAPLUS

CN 2-Furanmethanol, 5-(6-chloro-9H-purin-9-yl)-4-fluoro-2,5-dihydro-, (2S,5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 405238-74-6 HCAPLUS

CN 2-Furanmethanol, 5-(6-amino-2-fluoro-9H-purin-9-yl)-4-fluoro-2,5-dihydro-, (2S,5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. / Rotation (+).

RN 415705-27-0 HCAPLUS

CN 9H-Purin-6-amine, 9-(3-deoxy-3-fluoro-β-L-ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 415705-29-2 HCAPLUS

RN 415705-30-5 HCAPLUS

CN 9H-Purine, 6-chloro-9-(2,3-di-0-acetyl-β-D-ribofuranosyl)-2-iodo-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 415705-31-6 HCAPLUS

CN 9H-Purine, 6-chlor $\phi$ -9-(2,3-di-O-acetyl- $\beta$ -L-ribofuranosyl)-2-iodo-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

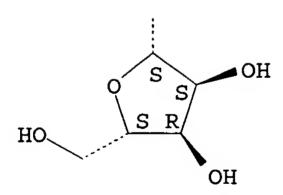
RN 415705-32-7 HCAPLUS

CN 9H-Purine, 6-chloro-9-β-L-ribofuranosyl- (9CI) (CA INDEX NAME)

RN 415705-84-9 HCAPLUS
CN 9H-Purin-2-amine, 6,6'-dithiobis[9-β-L-ribofuranosyl- (9CI) (CA INDEX NAME)

## PAGE 1-A

## PAGE 2-A



L24 ANSWER 26 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:293473 HCAPLUS

DOCUMENT NUMBER: 136:308528

TITLE: Vaccine compositions comprise Yershinia adhesion

protein as adjuvant

INVENTOR(S): Hermand, Philippe; Vande Velde, Vincent PATENT ASSIGNEE(S): Smithkline Beecham Biologicals SA, Belg.

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002030458	A1	20020418	WO 2001-EP3786	20010326
WO 2002030458	C1	20020718		

```
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BB, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
2001062163 A5 20020422 AU 2001-62163 20010326
```

AU 2001062163 A5 20020422 AU 2001-62163 20010326
PRIORITY APPLN. INFO.: GB 2000-25058 A 20001012
WO 2001-EP3786 W 20010326

The present invention relates to adjuvant compns. which are suitable to be used in vaccines. In particular, the adjuvant compns. of the present invention comprises a Yersinia adhesion protein, optionally with a carrier. Also provided by the present invention are vaccines comprising the adjuvants of the present invention and an antigen. Further provided are methods of manufacture of the adjuvants and vaccines of the present invention and their use as medicaments. Methods of treating an individual susceptible to or suffering from a disease by the administration of the vaccines of the present invention are also provided.

IT 2382-65-2

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligonucleotides containing; vaccine compns. comprise Yershinia adhesion
protein as adjuvant)

RN 2382-65-2 HCAPLUS

CN Guanosine, cytidylyl-(3'→5')- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 27 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:886155 HCAPLUS

DOCUMENT NUMBER: 136:590

TITLE: Methods and compositions using modified nucleosides

for treating flaviviruses and pestiviruses

INVENTOR(S): Sommadossi, Jean-Pierre; Lacolla, Paolo

PATENT ASSIGNEE(S): Novirio Pharmaceuticals Limited, Cayman I.; Universita

Degli Studi Di Cagliari

SOURCE: PCT Int. Appl., 302 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
DATE
     PATENT NO.
                      KIND
                                           APPLICATION NO.
                                           WO 2001-US16687
     WO 2001092282
                            20011206
                                                             20010523
     WO 2001092282
                       A3
                            20020502
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                       A2 \ 20030326
     EP 1294735
                                           EP 2001-952131
                                                             20010523
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV,\FI, RO, MK, CY, AL, TR
                                           US 2001-863816/ 20010523
     US 2003060400
                       A1
                            20030327
                                           JP 2002-500895
     JP 2004510698
                       T2
                            20040408
                                                             20010523
                            200\30117
     NO 2002005600
                       A
                                           NO 2002-5600
                                                             20021121
                            2004 0401
     US 2004063622
                       A1
                                           US 2003-602693/ 20030620
                                           US 2003-602692 20030620
                            20040520
     US 2004097462
                       A1
                                        US 2000-207674P P
                                                             20000526
PRIORITY APPLN. INFO.:
                                        US 2001-283276P P 20010411
                                        US 2001-863816
                                                          A3 20010523
                                        WO 2001-US16687 W 20010523
                         MARPAT 136:590
OTHER SOURCE(S):
     A method and composition are provided for treating a host infected with
     flavivirus or pestivirus, comprising administering an effective
     amount of a 1', 2' or 3'-modified nucleoside or a pharmaceutically
     acceptable salt or prodrug thereof \
IT
     15397-12-3 16848-12-7 374750-30-8
     374750-32-0
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (nucleoside derivs. for treating flaviviruses and
        pestiviruses)
RN
     15397-12-3 HCAPLUS
     Adenosine, 2'-C-methyl- (8CI, 9CI)
                                          (¢a index name)
CN
Absolute stereochemistry.
   NH2
                            OH
            Me'
                      OH
                 OH
```

RN 16848-12-7 HCAPLUS

CN Adenosine, 1'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 374750-30-8 HCAPLUS
CN Guanosine, 2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 374750-32-0 HCAPLUS

CN Inosine, 2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 374750-27-3 374750-29-5

RL: BSU (Biological study, unclassified); PKT (Pharmacokinetics)

; BIOL (Biological study)

(nucleoside derivs. for treating flaviviruses and

pestiviruses)

RN 374750-27-3 HCAPLUS

CN Adenosine 5'-(tetrahydrogen triphosphate), 2'-C-methyl- (9CI) (CA INDEX NAME)

McIntosh 10/602,693

Absolute stereochemistry.

$$NH_2$$
 $NH_2$ 
 $NH_2$ 

RN 374750-29-5 HCAPLUS

CN Guanosine 5'-(tetrahydrogen triphosphate), 2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 54401-19-3 374750-31-9

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nucleoside derivs. for treating **flaviviruses** and pestiviruses)

RN 54401-19-3 HCAPLUS

CN Guanosine, 1'-C-methy (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 374750-31-9 HCAPLUS

Inosine, 1'-C-methyl- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

L24 ANSWER 28 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:617773 HCAPLUS

DOCUMENT NUMBER:

135:175346

TITLE:

Method for the treatment or prevention of flavivirus infections using nucleoside

analogues

INVENTOR(S):

Ismaili, Hicham Moulay Alaoui; Cheng, Yun-Xing; Lavallee, Jean-Francois; Siddiqui, Arshad; Storer,

Richard

PATENT ASSIGNEE(S):

Biochem Pharma Inc., Can.

SOURCE:

PCT Int. Appl., 51 pp. CODEN: PIXXD2

DOCUMENT TYPE:

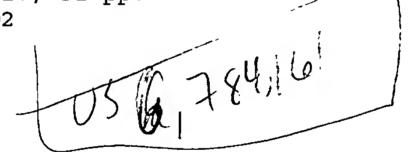
Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:



PA	TENT 1	NO.		KIND DATE					A.	PPLI	CATI	ο.	DATE				
	<b>-</b>							-									
WO	2001	0603	15	A2 20010823				M	0 20	01-C		20010219					
WO	2001	0603	15	A	3	20030116											
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY.,	BZ,	CA,	CH,	CN,
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
		HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,
		SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,
		YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM				
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
AU	AU 2001035278				A5 20010827				A	U 20	01-3		20010219				
EP	1296690			A2 20030402				E	P 20	01-9	6	20010219					
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
JP	2003	T2 20030812				JP 2001-559414						20010219					
US	A1 20020214			US 2001-785235						20010220							
NO	Α	A 20021017			NO 2002-3884						20020816						
PRIORITY APPLN. INFO.								1	US 2	000-	1833	49P	P	2000	0218		
								1	WO 2	001-	CA19	7	W	2001	0219		
OTHER S	OURCE	(S):			MAR	PAT	135:	1753	75346								

The present invention relates to a method for the treatment or prevention AB

of Flavivirus infections using nucleoside analogs in a host comprising administering a therapeutically effective amount of the nucleoside analog or a pharmaceutically acceptable salt thereof. 2004-07-1 3608-58-0, 3'-Deoxyguanosine IT27462-39-1 55968-37-1, 3'-Deoxyguanosine-5'-triphosphate 123402-21-1 123402-27-7 141320-63-0 355805-44-6 355805-45-7 355805-55-9 355805-62-8 355805-63-9 355805-64-0 355805-72-0 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (method for treatment or prevention of flavivirus infections using nucleoside analogs and their combination with other agents in relation to hepatitis C virus RNA-dependent RNA polymerase (NS5B protein)) 2004-07-1 HCAPLUS RN9H-Purin-2-amine, 6-chloro-9-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 3608-58-0 HCAPLUS
CN Guanosine, 3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

$$H_2N$$
 $N$ 
 $R$ 
 $R$ 
 $S$ 
 $OH$ 

RN 27462-39-1 HCAPLUS
CN 6H-Purin-6-one, 2-amino-1,9-dihydro-9-β-D-xylofuranosyl- (9CI) (CA
INDEX NAME)

RN 55968-37-1 HCAPLUS

CN Guanosine 5'-(tetrahydrogen triphosphate), 3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 123402-21-1 HCAPLUS

CN Guanosine, 3'-deoxy-3'-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $N$ 
 $R$ 
 $R$ 
 $R$ 
 $S$ 
 $S$ 
 $S$ 
 $HO$ 
 $F$ 

RN 123402-27-7 HCAPLUS

CN Guanosine 5'-(tetrahydrogen triphosphate), 3'-deoxy-3'-fluoro- (9CI) (CA INDEX NAME)

RN 141320-63-0 HCAPLUS CN Guanosine, 3'-deoxy-3'-methylene- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 355805-44-6 HCAPLUS CN Guanosine, N-acetyl-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 355805-45-7 HCAPLUS
CN Guanosine 5'-(tetrahydrogen triphosphate), N-acetyl

Guanosine 5'-(tetrahydrogen triphosphate), N-acetyl-3'-deoxy- (9CI) (CA INDEX NAME)

RN 355805-55-9 HCAPLUS

CN 9H-Purin-2-amine, 6-chloro-9-[5-0-[hydroxy[[hydroxy(phosphonooxy)phosphiny l]oxy]phosphinyl]-β-D-ribofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 355805-62-8 HCAPLUS

CN Guanosine 5'-(tetrahydrogen triphosphate), 3'-deoxy-3'-methylene- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 355805-63-9 HCAPLUS

CN Guanosine, 3'-deoxy-3'-(difluoromethylene)- (9CI) (CA INDEX NAME)

RN 355805-64-0 HCAPLUS

CN Guanosine 5'-(tetrahydrogen triphosphate), 3'-deoxy-3'-(difluoromethylene)(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 355805-72-0 HCAPLUS

CN 6H-Purin-6-one, 2-amino-1,9-dihydro-9-[5-0-[hydroxy[[hydroxy(phosphonooxy) phosphinyl]oxy]phosphinyl]-β-D-xylofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 29 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:300514 HCAPLUS

DOCUMENT NUMBER:

134:331617

TITLE:

Oil-in-water emulsion compositions for polyfunctional

active ingredients

INVENTOR(S):

Chen, Feng-jing; Patel, Mahesh V.

PATENT ASSIGNEE(S): SOURCE:

Lipocine, Inc., USA PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

AB

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2001028555 A1 20010426 WO 2000-US28835 20001018 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE,/LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG US 1999-420159 **A**1 20020808 US 2002107265 19991018 20040413 US 6720001 **B**2 PRIORITY APPLN. INFO.: US 1999-420159 A 19991018 Pharmaceutical oil in-water emulsions for delivery of polyfunctional active ingredients with improved loading capacity, enhanced stability, and reduced irritation and local toxicity are described. Emulsions include an aqueous phase, an oil phase comprising a structured triglyceride, and an emulsifier. The structured triglyceride of the oil phase is substantially free of triglycerides having three medium chain (C6-C12) fatty acid moieties, or a combination of a long chain triglyceride and a polarity-enhancing polarity modifier. The present invention also provides methods of treating an animal with a polyfunctional active ingredient, using dosage forms of the pharmaceutical emulsions. For example, an emulsion was prepared, with cyclosporin A as the polyfunctional active ingredient dissolved in an oil phase including a structured triglyceride (Captex 810D) and a long chain triglyceride (safflower oil). The composition

21679-14-1, Fludarabine IT

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (oil-in-water emulsion compns. for polyfunctional active ingredients)

BHT 0.02, egg phospholipid 2.4, dimyristoylphosphatidyl glycerol 0.2,

contained (by weight) cyclosporin A 1.0, Captex 810D 5.0, safflower oil 5.0,

RN21679-14-1 HCAPLUS

9H-Purin-6-amine, 9- $\beta$ -D-arabinofuranosyl-2-fluoro- (9CI) (CA INDEX CN NAME)

glycerol 2.25, EDTA 0.01, and water up to 100%, resp.

```
THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                         6
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 30 OF 41
                               COPYRIGHT 2004 ACS on STN
                      HCAPLUS
L24
                         2001:136991 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         134:198075
                         Triglyceride-free compositions and methods for
TITLE:
                         enhanced absorption of hydrophilic therapeutic agents
                         Patel, Mahesh V.; Chen, Feng/Jing
INVENTOR(S):
                         Lipocine, Inc., USA
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 113 pp.
SOURCE:
                         CODEN: PIXXD2
                         Patent
DOCUMENT TYPE:
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
                         12
PATENT INFORMATION:
                                           APPLICATION NO.
                            DATE
                      KIND
     PATENT NO.
                       A1
                                           WO /2000-US18807
                                                             20000710
     WO 2001012155
                            20010222
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL/, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6309663
                       B1
                            20011030
                                           US 1999-375636
                                                             19990817
                       A1
                            20020605
                                          IEP 2000-947184
                                                             20000710
     EP 1210063
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
                                                             20000710
     JP 2003506476
                       T2
                            20030218
                                           JP 2001-516502
                       A1
                            20010927
                                           US 2000-751968
                                                             20001229
     US 2001024658
                       B2
                            20021001
     US 6458383
                                        U$ 1999-375636
PRIORITY APPLN. INFO.:
                                                         A 19990817
                                        WO 2000-US18807 W 20000710
     The present invention relates to triglyceride-free pharmaceutical compns.,
AB
     pharmaceutical systems, and methods for enhanced absorption of hydrophilic
     therapeutic agents. The compns. and systems include an absorption
     enhancing carrier, where the carrier is formed from a combination of at
     least two surfactants, at least one of which is hydrophilic. A
     hydrophilic therapeutic agent can be incorporated into the composition, or can
     be co-administered with the composition as part of a pharmaceutical system.
     The invention also provides methods of treatment with hydrophilic
     therapeutic agents using these compns. and systems. For example, when a
     composition containing Cremophor RH40 0.30, Arlacel 186 0.20, Na taurocholate
0.18,
     and propylene glycol 0.32 g, resp., was used, the relative absorption of
     PEG 4000 as a model macromol. drug was enhanced by 991%.
     53-79-2, Puromycin 21679-14-1, Fludarabine
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (compns. for enhanced absorption of hydrophilic drugs using combination
        of surfactants)
     53-79-2 HCAPLUS
RN
     Adenosine, 3'-[[(2S)-2-amino-3-(4-methoxyphenyl)-1-oxopropyl]amino]-3'-
CN
     deoxy-N, N-dimethyl- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

RN 21679-14-1 HCAPLUS

CN 9H-Purin-6-amine, 9-β-D-arabinofuranosyl-2-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 31 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

1

ACCESSION NUMBER: 2001:16333 HCAPLUS

DOCUMENT NUMBER: 134:246909

TITLE: A Novel Model for the Study of the Therapy of

Flavitirus Infections Using the Modoc Virus Leyssen, Pieter; Van Lommel, Alfons; Drosten,

AUTHOR(S): Leyssen, Pieter; Van Lommel, Alfons; Drosten, Christian; Schmitz, Herbert; De Clercq, Erik; Neyts,

Johan \

CORPORATE SOURCE: Rega Institute for Medical Research, Katholieke

Universiteit Leuven, Louvain, B-3000, Belg.

SOURCE: Virology \((2001), 279(1), 27-37

CODEN: VIRLAX; ISSN: 0042-6822

PUBLISHER: Academic Press

PUBLISHER: ACADEMIC Press

DOCUMENT TYPE: Journal LANGUAGE: English

The murine Flavivirus Modoc replicates well in Vero cells and appears to be as equally sensitive as both yellow fever and dengue fever virus to a selection of antiviral agents. Infection of SCID mice, by either the intracerebral, i.p., or intranasal route, results in 100% mortality. Immunocompetent mice and hamsters proved to be susceptible to the virus only when inoculated via the intranasal or intracerebral route. Animals ultimately die of (histol. proven) encephalitis with features

similar to Flavivirus encephalitis in man. Viral RNA was detected in the brain, spleen, and salivary glands of infected SCID mice and the brain, lung, kidney, and salivary glands of infected hamsters. In SCID mice, the interferon inducer poly IC protected against Modoc virus-induced morbidity and mortality and this protection was associated with a reduction in infectious virus content and viral RNA load. Infected hamsters shed the virus in the urine. This allows daily monitoring of (inhibition of) viral replication, by means of a noninvasive method and in the same animal. The Modoc virus model appears attractive for the study of chemoprophylactic or chemotherapeutic strategies against Flavivirus infections. (c) 2001 Academic Press. 24939-03-5, Poly IC

IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(model for study of therapy of flavivirus infections using Modoc virus)

24939-03-5 HCAPLUS RN

> 5'-Inosinic acid, homopolymer, complex with 5'-cytidylic acid homopolymer (1:1) (9CI) (CA INDEX NAME)

CM 1

CN

CRN 30918-54-8

CMF (C10 H13 N4 O8 P)x

CCI PMS

CM 2

CRN 131-99-7

CMF C10 H13 N4 O8 P

Absolute stereochemistry.

```
McIntosh 10/602,693
                                   OH
                    HO
                           R S
                                            OPO<sub>3</sub>H<sub>2</sub>
H_2N
```

THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS 56 REFERENCE COUNT: RECORD. ALL CITATIÓNS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2004 ACS on STN L24 ANSWER 32 OF 41

ACCESSION NUMBER:

PATENT ASSIGNEE(S):

2000:756545 HCAPLUS

DOCUMENT NUMBER:

133:340220

TITLE:

Adjuvant comprising a saponin and an immunostimulatory

oligonucleotide for manufacture of vaccines

INVENTOR(S):

Friede, Martin; Garcon, Nathalie; Hermand, Philippe

Smithkline Beecham Biologicals SA, Belg. PCT Int. Appl., /52 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
DATE
     PATENT NO.
                      KIND
                                            APPLICATION NO.
     WO 2000062800
                       A2
                            20001026
                                            WO 2000-EP2920
                                                             20000404
     WO 2000062800
                       A3
                            20010111
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, DZ, EE', ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,
             IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
             MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,
             SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, $D, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                       B1
                            20030506
                                            US 1999-301829
                                                             19990429
     US 6558670
     BR 2000010612
                            20020213
                                            BR 2000-10612
                                                             20000404
                       Α
                            20020221
     TR 200103018
                       T2
                                            TR 2001-20010301820000404
                            20020320
     EP 1187629
                       A2
                                            EP 2000-920647
                                                             20000404
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                            20021210
                       T2
                                            JP 2000-611936
     JP 2002542203
                                                             20000404
     AU 764969
                       B2
                            20030904
                                            AU 2000-41149
                                                             20000404
                            20030408
     US 6544518
                       B1
                                            US 2000-690921
                                                             20001018
    NO 2001005073
                            20011122
                                            NO 2001-5073
                       Α
                                                             20011018
                            20020912
     ZA 2001008619
                       A
                                            ZA 2001-8619
                                                             20011019
                            20030828
                       A1
                                            US 2003-379164
     US 2003161834
                                                             20030303
PRIORITY APPLN. INFO.:
                                         GB 1999-8885
                                                          A 19990419
                                         US 1999-301829
                                                          Α
                                                            19990429
                                         WO 2000-EP2920
                                                          W
                                                             20000404
```

ABThe present invention relates to adjuvant compns. which are suitable to be

US 2000-690921

A3 20001018

used in vaccines. In particular, the adjuvant compns. of the present invention comprises a saponin and an immunostimulatory oligonucleotide, optionally with a carrier. Also provided by the present invention are vaccines comprising the adjuvants of the present invention and an antigen. Further provided are methods of manufacture of the adjuvants and vaccines of the present invention and their use as medicaments. Methods of treating an individual susceptible to or suffering from a disease by the administration of the vaccines of the present invention are also provided. 2382-65-2

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PRØC (Process); USES (Uses)

(adjuvant comprising a saponin and an immunostimulatory oligonucleotide for manufacture of vaccines)

2382-65-2 HCAPLUS RN

Guanosine, cytidyly ¼-(3'→5')- (7CI, 8CI, 9CI) (CA INDEX NAME) CN

L24 ANSWER 33 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2000:608598 HCAPLUS

DOCUMENT NUMBER:

133:187940

TITLE:

IT

Synergistic combination for treatment of

viral-mediated diseases

INVENTOR (S):

Tan, Yin Hwee; Driscoll, John S.

PATENT ASSIGNEE(S):

Institute of Molecular and Cell Biology, Singapore

PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KI	ND !	DATE			A	PPLI	CATI	ο.	DATE									
									_													
WO 2000050064			A	2 :	20000831			WO 2000-US4699 20000225														
•	WO 2000050064				A.	3 :	20010405			,												
		W:	AE,	AL,	AM,	AT,	AU,	AZ,	$BA_{i}$	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,				
			DE,	DK,	EE,	ES,	FI,	GB,	$GD_{\prime}$	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,				
			JP,	KE,	KG,	KP,	KR,	KZ,	Lď,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,				
			MN,	MW,	MX,	NO,	NZ,	PL,	ΡŢ,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,				
			TM,	TR,	TT,	UA,	UG,	US,	ŲŹ,	VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	KZ,				
			MD,	RU,	TJ,	TM																
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,				
			DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,				

```
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                         EP 2000-913596
                            20011121
     EP 1154787
                       A2
                                                             20000225
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.:
                                        US 1999-121931P P 19990226
                                        US 2000-181068P P 20000208
                                        WO 2000-US4699
                                                         W 20000225
OTHER SOURCE(S):
                         MARPAT 133:187940
     Flavivirus and rhabdovirus infections may be treated by
     administering an interferon such as interferon \alpha^2, interferon
     α8 dr interferon β and at least one compound selected from
     5-membered cyclic nucleosides, mycophenolic compds., imidazole derivs.,
     aminoadamantanes and 2,4-diaminopyrimidines. An example showed the
     enhancement of antiviral effects of interferons by cyclopentenyl cytosine.
     19186-33-5, Aristeromycin
IT
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (synergistic antiviral combination of interferons and heterocyclic
        compds.)
     19186-\(\beta\)3-5 HCAPLUS
RN
     1,2-Cyclopentanediol, 3-(6-amino-9H-purin-9-yl)-5-(hydroxymethyl)-,
CN
     (1R, 2S, 3R, 5R) - (8CI, 9CI) (CA INDEX NAME)
Absolute stemeochemistry. Rotation (-).
   NH_2
                  OH
                        OH
```

L24 ANSWER 34 OF 41 HCAPLUS COPYRIGHT/2004 ACS on STN

1999:242170 HCAPLUS ACCESSION NUMBER:

R

DOCUMENT NUMBER: 131:84756

The 37-Amino-Acid Interdomain of Dengue Virus NS5 TITLE:

Protein Contains a Functional NLS and Inhibitory CK2

Site

Forwood, Jade K.; Brooks, Andrew; Briggs, Lyndall J.; AUTHOR(S):

Xiao, Chong-Yun; Jans, David A.; Vasudevan, Subhash G.

Department of Biochemistry and Molecular Biology, CORPORATE SOURCE:

James Cook University of North Queensland, Townsville,

Australia

Biochemical and Biophysical Research Communications SOURCE:

(1999), 257(3), 731-737

CODEN: BBRCA9; ISSN: 0006-291X

Academic Press PUBLISHER:

Journal DOCUMENT TYPE: English LANGUAGE:

The dengue virus NS5 RNA-dependent RNA polymerase has been detected in the AB nucleus of virus-infected mammalian cells. We demonstrate here for the first time using in vitro and in vivo assay systems that the 37-amino-acid

linker interdomain of NS5 (residues, 369 to 405) contains a nuclear localization sequence (NLS) which is capable of targeting b-galactosidase to the nucleus. Further, we show that the linker is recognized by subunits of the NLS-binding importin complex with an affinity similar to that of the bipartite NLS of the retinoblastoma protein and, in analogous fashion to proteins such as the SV40 large tumor antigen, contains a functional protein kinase CK2/phosphorylation site (threonine 395). Interestingly, this site appéars to inhibit NS5 nuclear targeting, probably through a cytoplasmic retention mechanism. The linker may have an important role in targeting NS5 to the nucleus in a regulated manner during the dengue virus infectious cycle. (c) 1999 Academic Press. 56-65-5, 5'-ATP, biological studies RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (nuclear import of NS5 dependence on ATP; interdomain of dengue virus NS5 RNA-dependent RNA polymerase contains a functional NLS and inhibitory CK2 site) 56-65-5 HCAPLUS Adenosine 5'-(tetrahýdrogen triphosphate) (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT

RN

CN

REFERENCE COUNT:

THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 35 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

30

ACCESSION NUMBER: 1998:293/319 HCAPLUS

DOCUMENT NUMBER: 129:579/

TITLE: Induction of viral mutation by incorporation of

miscoding ribonucleoside analogs into viral RNA

INVENTOR(S): Loeb,/Lawrence A.; Mullins, James I.

PATENT ASSIGNEE(S): University of Washington, USA

SOURCE: PCT /Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9818324 A1 19980507 WO 1997-US19670 19971027

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

```
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
            GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
            GN, ML, MR, NE, SN, TD, TG
                                           AU 1998-50959
                                                            19971027
                      A1
                           19980522
    AU 9850959
                            20011115
    AU 740916
                      B2
                                           EP 1997-913882
                            19991013
                       A1
                                                            19971027
    EP 948256
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
                            20001222
                                                            19971027
                       A
                                           NZ 1997-335000
    NZ 335000
                       T2
                            20011211
                                           JP 1998-520739
                                                            19971027
     JP 2001525797
PRIORITY APPLN. INFO.:
                                        US 1996-29404P P 19961028
                                        US 1997-40535P P 19970227
                                        WO 1997-US19670 W 19971027
    The invention is directed to the identification and use of ribonucleoside
AB
     analogs to induce the mutation of an RNA virus, including HIV and HCV, or
     a virus which otherwise replicates through an RNA intermediate. The
     increase in the mutation rate of the virus results in reduced viability of
    progeny generations of the virus, thereby inhibiting viral replication.
     In addition to these methods and related compns., the invention provides
     methods and combinatorial chemical libraries for screening ribonucleoside
     analogs for mutagenic potential.
     58-61-7D, Adenosine, derivs., biological studies 118-00-3D
IT
     , Guanosine, derivs., biological studies 1867-73-8
     1867-73-8D, derivs. 3868-31-3, 8-Hydroxyguanosine
     3868-31-3D, 8-Hydroxyguanosine, derivs. 3868-32-4,
     8-Aminoguanosine 3868-32-4D, 8-Aminoguanosine, derivs.
     7803-88-5 7803-88-5D, derivs. 39007-51-7
     39007-51-7D, derivs. 39007-52-8 39007-52-8D,
     derivs. 39708-01-5 39708-01-5D, derivs.
     72055-62-0, 3-Methyladenosine 72055-62-0D,
```

derivs. 108060-85-1 108060-85-1D, derivs. RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (induction of viral mutation by incorporation of miscoding

3-Methyladenosine, derivs. 82773-20-4 82773-20-4D,

ribonucleoside analogs into viral RNA, and screening method)

58-61-7 HCAPLUS RN

(CA INDEX NAME) Adenosine (8CI, 9CI) CN

Absolute stereochemistry.

RN 1867-73-8 HCAPLUS

CN Adenosine, N-methyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 1867-73-78 HCAPLUS

CN Adenosine, N-methyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 3868-31-3 HCAPLUS

CN Guanosine, 7,8-dihydro-8-oxo- (9CI) (CA INDEX NAME)

$$H_2N$$
 $H_2N$ 
 $H_3$ 
 $H_4$ 
 $H_5$ 
 $H_6$ 
 $H_$ 

RN 3868-31-3 HCAPLUS CN Guanosine, 7,8-dihydro-8-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $H_1$ 
 $H_2$ 
 $H_3$ 
 $H_4$ 
 $H_5$ 
 $H_6$ 
 $H_6$ 
 $H_7$ 
 $H_8$ 
 $H_8$ 
 $H_8$ 
 $H_8$ 
 $H_9$ 
 $H_9$ 

RN 3868-32-4 HCAPLUS CN Guanosine, 8-amino- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 3868-32-4 HCAPLUS

CN Guanosine, 8-amino- (9CI) (CA INDEX NAME)

RN 7803-88-5 HCAPLUS

CN Guanosine, 6-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 7803-88-5 HCAPLUS

CN Guanosine, 6-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 39007-51-7 HCAPLUS

CN 3H-Imidazo[2,1-i]purine, 3-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

RN 39007-51-7 HCAPLUS

CN 3H-Imidazo[2,1-i]purine, 3-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 39007-52-8 HCAPLUS

CN Imidazo[1,2-c]pyrimidin-5(6H)-one, 6-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 39007-52-8 HCAPLUS

CN Imidazo[1,2\c]pyrimidin-5(6H)-one, 6-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 39708-01-5 HCAPLUS

CN Guanosine, 6-0-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 39708-01-5 HCAPLUS

CN Guanosine, 6-0-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 72055-62-0 HCAPLUS

CN Adenosine, 3-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 72055-62-0 HCAPLUS

CN Adenosine, 3-methyl- (9CI) (CA INDEX NAME)

RN 82773-20-4 HCAPLUS

CN Guanosine, 6-O-(1-methylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 82773-20-4 HCAPLUS

CN Guanosine, 6-O-(1/methylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 108060-85-1 HCAPLUS

CN 1H-Imidazo[2,1-b]purin-4(5H)-one, 1-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

RN 108060-85-1 HCAPLUS

CN 1H-Imidazo[2,1-b]purin-4(5H)-one, 1-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 36 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:147346 HCAPLUS

DOCUMENT NUMBER: 128:213381

TITLE: Compositions and methods for treating infections using

analogs of indolicidin

INVENTOR(S): Fraser, Janet R.; West, Michael H. P.; Krieger,

Timothy J.; Taylor, Robert; Erfle, Douglas

PATENT ASSIGNEE(S): Micrologix Biotech, Inc., Can.; Fraser, Janet R.;

West, Michael H. P.; Krieger, Timothy J.; Taylor,

Robert; Erfle, Douglas PCT Int. Appl., 130 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

SOURCE:

PATENT NO. KIND DATE APPLICATION NO. DATE

```
19980226
                                           WO 1997-US14779 19970821
     WO 9807745
                       A2
                       A3
                            19980709
     WO 9807745
            AL, AM, AT, AU, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK,
             EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN,
             YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
             GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
             GN, ML, MR, NE, SN, TD, TG
                                           AU 1997-43279
                                                             19970821
                       A1
                            19980306
     AU 9743279
                                           EP 1997-941352
                                                             19970821
     EP 925308
                       A2
                            19990630
                       B1
                            20020605
     EP 925308
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
                                           JP 1998-510994
                       T2
                            20010116
                                                             19970821
     JP 2001500477
                                           EP 2001-119148
                                                             19970821
                       A2
                            20020123
     EP 1174439
                       A3
                            20030326
     EP 1174439
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
                            20020615
                                           AT 1997-941352
                                                             19970821
     AT 218579
                       E
                                                             19970821
     ES 2178000
                       Т3
                            20021216
                                           ES 1997-941352
                                                             19991230
     HK 1021824
                       A1
                            20030221
                                           HK 1999-106212
                       A1
                                                             20030124
     US 2004009910
                            20040115
                                           US 2003-351985
                                        US 1996-24754P P 19960821
PRIORITY APPLN. INFO.:
                                        US 1997-34949P
                                                          P 19970113
                                        US 1997-915314
                                                          A1 19970820
                                                          A3 19970821
                                        EP 1997-941352
                                         WO 1997-US14779
                                                         ·W 19970821
                                        US 2000-667486
                                                          A1 20000922
                         MARPAT 128:21,3381
OTHER SOURCE(S):
     Compns. and methods for treating infections, especially bacterial infections,
AB
     are provided. Indolicidin peptide analogs containing at least two basic amino
     acids are prepared The analogs are administered as modified peptides,
     preferably containing photo-oxidized solubilizer.
     5536-17-4, Vidarabine
IT
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (indolicidin analogs, and combinations with other agents, for treating
        infections)
     5536-17-4 HCAPLUS
RN
     9H-Purin-6-amine, 9 \neq \beta-D-arabinofuranosyl- (9CI) (CA INDEX NAME)
CN
Absolute stereochemistry.
   NH_2
                            OH
```

OH

```
L24 ANSWER 37 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                         1995:810683 HCAPLUS
                         123:188560
DOCUMENT NUMBER:
                         ATP as inhibitor of viruses in relation to rabies and
TITLE:
                         West Nile viruses
                         Votyakov, Veniamin I.; Mishaeva, Nina P.; Zubovich,
INVENTOR(S):
                         Irina K.; Azarova, Irina A.
                         Belorusskij Nauchno-Issledovatelskij Institut
PATENT ASSIGNEE(S):
                         Epidemiologii i Mikrobiologii, USSR
                         U.S.S.R. From: Izobreteniya 1993, (26), 14.
SOURCE:
                         CODEN: URXXAF
                         Patent
DOCUMENT TYPE:
                         Russian
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                            DATE
                                                             DATE
     PATENT NO.
                      KIND
                                            APPLICATION NO.
                            19930715
                       A1
                                            SU 1990-4780028
                                                             19900108
     SU 1827251
PRIORITY APPLN. INFO.:
                                         SU 1990-4780028
                                                             19900108
     Title only translated.
     56-65-5, 5'-ATP, biological studies
IT
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (ATP as inhibitor of viruses in relation to rabies and West Nile
        viruses)
     56-65-5 HCAPLUS
RN
     Adenosine 5'-(tetrahydrogen triphosphate) (8CI, 9CI) (CA INDEX NAME)
CN
Absolute stereochemistry
  NH_2
                                  OPO3H2
\mathbf{N}
  N
              R
              R S
                    OH
L24 ANSWER 38 OF 41
                      HCAPLUS COPYRIGHT 2004 ACS on STN
                         1994:595323 HCAPLUS
ACCESSION NUMBER:
                         121:195323
DOCUMENT NUMBER:
                         Immunotherapy of viral encephalitis: use of
TITLE:
                         polyinosinic polycytidylic acid in prophylaxis and
                         therapy of Banzi virus encephalitis
                         Barnhart, Dean Co.
AUTHOR(S):
                         University of South Carolina, SC, USA
CORPORATE SOURCE:
                          (1993) 143 pp. Avail.: Univ. Microfilms Int., Order
SOURCE:
                         No. DA9400188
                         From: Diss. Abstr. Int. B 1994, 55(1), 71
                         Dissertation
DOCUMENT TYPE:
```

English

LANGUAGE:

```
Unavailable
AB
     24939-03-5, Polyriboinosinic polyribocytidylic acid
IT
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (polyinosinic polycytidylic acid in prophylaxis and therapy of Banzi
       virus encephalitis)
     24939-03-5 HCAPLUS
RN
     5'-Inosinic acid, homopolymer, complex with 5'-cytidylic acid homopolymer
CN
     (1:1) (9CI) (CA INDEX NAME)
     CM
          1
     CRN 30918-54-8
     CMF (C10 H13 N4 O8 P)x
     CCI PMS
          CM
               131-99-7
          CRN
          CMF
               C10 H13 N4 O8 P
Absolute stereochemistry.
                        OP03H2
```

CRN 30811-80-4

CMF (C9 H14 N3 O8 P)x

CCI PMS

CM

CM 4

CRN 63-37-6

CMF C9 H14 N3 O8 P

OH

HO OH
$$R S$$

$$R R$$

$$OPO_3H_2$$

L24 ANSWER 39 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1988:436458 HCAPLUS

DOCUMENT NUMBER: 109:36458

TITLE: Comparative study of various immunomodulators for

macrophage and natural killer cell activation and

antiviral efficacy against exotic RNA viruses

AUTHOR(S): Pinto, Angelo J.; Morahan, Page S.; Brinton, Margo A.

CORPORATE SOURCE: Dep. Microbiol. Immunol., Med. Coll. Pennsylvania,

Philadelphia, PA, 19129, USA

SOURCE: International Journal of Immunopharmacology (1988),

10(3), 197-209

CODEN: IJIMDS; ISSN: 0192-0561

DOCUMENT TYPE: Journal LANGUAGE: English

Several immunomodulators were compared for immunomodulatory and antiviral ABactivity in B6C3F1 female mice. Murine recombinant  $\gamma$ -interferon (rIFN-G), human recombinant alpha A/D interferon (rIFN-A), ampligen (a polyribonucleotide) and CL246,738 modulate nonspecific immunity and are effective antiviral agents in vivo. Administration of each of these agents 1 day before cell harvest induced high levels of splenic natural killer (NK) cell activity against YAC-1 target cells. The rIFN-G was also a potent activator of peritoneal macrophages (M.vphi.), as evidenced by high levels of antitumor activity and changes in ectoenzyme phenotype that is characteristic of tumoricidal M.vphi.. RIFN-A, ampligen and CL246,738 induced moderate to low levels of M.vphi. activation by these criteria. In vivo protection expts. showed that repeated therapeutic treatment with rIFN-A protected mice against i.p. infection with Venezuelan equine encephalitis virus (an alpha togavirus, VEE), Banzi virus (a flavivirus) and herpes simplex virus type 2 (HSV-2). Similar treatment with rIFN-G was effective against VEE and HSV-2, but ineffective against Banzi virus. A single prophylactic i.p. dose of ampligen 1 day before virus challenge was very effective against Banzi virus, moderately effective against HSV-2, and ineffective against VEE and Caraparu virus (a bunyavirus) infection. A single prophylactic oral dose of CL246,738 provided almost complete protection of mice against VEE, Banzi, and HSV-2, and also increased the mean survival time for Caraparu virus-infected mice. These results indicate that rIFN-A, r-IFN-G, ampligen and CL246,738 may be useful in prophylactic or early therapeutic treatment of several serious virus infections. Since these agents stimulate NK cells and M.vphi., their antiviral activity may result, in part, from the alterations they induce in the natural immune system.

IT 38640-92-5, Ampligen

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (antiviral activity of, macrophage and natural killer cell activation in)

RN 38640-92-5 HCAPLUS

CN 5'-Inosinic acid, homopolymer, complex with 5'-cytidylic acid polymer with 5'-uridylic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 30918-54-8

CMF (C10 H13 N4 O8 P)x

CCI PMS

CM 2

CRN 131-99-7 CMF C10 H13 N4 O8 P

## Absolute stereochemistry.

## Absolute stereochemistry.

L24 ANSWER 40 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1981:562106 HCAPLUS

DOCUMENT NUMBER: 95:162106

TITLE: Interferon inducing and antiviral activity of

levamisole

AUTHOR(S): Ershov, F. I.; Grigoryan, S. S.; Kremerman, I. B.;

Nikolaeva, O. V.

CORPORATE SOURCE: D. I. Ivanovskii Inst. Virol., Moscow, USSR

SOURCE: Antibiotiki (Moscow) (1981), 26(8), 617-20

CODEN: ANTBAL; ISSN: 0003-5637

DOCUMENT TYPE: Journal Russian

The median LD of levamisole-HCl (I) [16595-80-5] for mice was 900 mg/kg orally. Mice receiving 100 mg I/kg orally showed blood interferon of 320-640 units/mL in 5-6 h, after which it fell to 80 units/mL and remained at this level for 5 days. Simultaneous administration of I and another interferon inducer polyguacil [25280-45-9] showed that the 2 compds. were additive in their inducing ability. I at 100 mg/kg protected 35-40% of mice when given 4 or 24 h before infection with a 10 + LD50 dose of Russian tick-borne encephalitis and 15% of mice when given 4 h before a 10 + LD50 dose of influenza virus.

IT 25280-45-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (antiviral and interferon inducing activity of)

RN 25280-45-9 HCAPLUS

CN 5'-Guanylic acid, homopolymer, complex with 5'-cytidylic acid homopolymer (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 30811-80-4

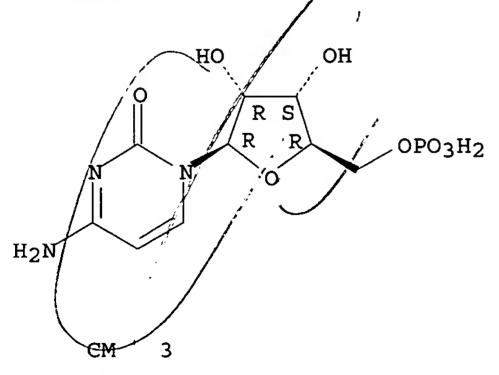
CMF (C9 H14 N3 O8 P)x

CCI PMS

CM 2

CRN 63-37-6 CMF C9 H14 N3 08 P

Absolute stereochemistry.



CRN 25191-14-4

CMF (C10 H14 N5 O8 P)x

CCI PMS

CM 4

CRN 85-32-5 CMF C10 H14 N5 O8 P

Absolute stereochemistry.

L24 ANSWER 41 OF 41 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1977:462689 HCAPLUS

DOCUMENT NUMBER: 87:62689

TITLE: Study of the antiviral activity of a complex of

poly-I-poly-C with poly-L-lysine in monkeys

AUTHOR(S): Burgasova, M. P.

CORPORATE SOURCE: Moscow Res. Inst. Viral Prep., Moscow, USSR SOURCE: Antibiotiki (Moscow) (1977), 22(5), 458-60

CODEN: ANTBAL; ISSN: 0003-5637

DOCUMENT TYPE: Journal Russian

AB S. c. injection of the interferon-inducing complex of double stranded poly I-poly C with poly-L-lysine decreased the intensity and duration of skin affections and increased the incubation period of variolovaccine in s.c. infected rhesus monkeys; i.v. injection of the complex was less effective. The complex also showed some prophylactic activity against tick-borne encephalitis in rheus monkeys.

IT 24939-03-5D, poly-L-lysine complexes

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(virucidal activity of)

RN 24939-03-5 HCAPLUS

CN 5'-Inosinic acid, homopolymer, complex with 5'-cytidylic acid homopolymer (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 30918-54-8

CMF (C10 H13 N4 O8 P)x

CCI PMS

CM 2

CRN 131-99-7

CMF C10 H13 N4 O8 P

Absolute stereochemistry.

CM 3

CRN 30811-80-4

CMF (C9 H14 N3 O8 P)x

CCI PMS

CM 4

CRN 63-37-6

CMF C9 H14 N3 O8 P